

Pranic Healing Suggestion in the Treatment of Asthma

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This study examines the effect of verbal and nonverbal modes of treatment of Pranic Healing Suggestion (PHS) on alleviation of asthma using within subjects design and independent groups design. Thirty-four asthmatic girls between 10 to 17 years were divided into four randomized groups for the 14-week long experimental study. Three groups were treated using PHS with gestures and words, PHS with gestures alone, and PHS with words alone respectively, whereas the fourth group served as the control group. Their weekly asthma level was measured by recording the frequency, duration, medication taken, and global impression of severity of asthma attacks. Data analysis shows that PHS with gestures and words, PHS with gestures alone, and PHS with words alone are effective in the alleviation of asthma. Secondly, the verbal and nonverbal modes of communication of PHS are equally effective in the alleviation of asthma indicating that suggestive methods with imaginative strategies lead to altered state of consciousness, and activate the body's own healing power. Clinical implications in autosuggestion and heterosuggestion are also discussed.

Pranic Healing is an ancient art of healing utilizing *prana* (in *sanskrit*) or *ki* (in Chinese) meaning “vital energy” which is used to heal the body from ailments. The practice originated in the yogic tradition of ancient India and was later practised in China (Choa, 1990). Choa Kok Sui, the founder of World Pranic Healing Foundation in Manila, learned it from his teacher Mei Ling in China and now teaches it in many countries.

It is the characteristic of yogic tradition and other systems of ancient medicine to live in harmony with nature and oneself. Sickness is considered a condition caused by lack of harmony and uneven distribution of *prana* in the body. Pranic healing is perceived to relieve the patient’s mind from fear, worries, and depressing thoughts which have prevented the proper amount of *prana* from being distributed to the other parts of the body (Ramacharaka in Mishlove, 1975).

Two basic principles in the practice of pranic healing are cleansing and energizing of the patient’s bioplasmic body with *prana* or vital energy. In yogic tradition, chakras are believed to be whirling energy centers in the bioplasmic body. There are 11 major and many minor chakras. They control and energize the major and vital organs of the visible physical body. It is by cleansing and removing the diseased bioplasmic matter from the affected chakras and diseased organ, and energizing them with sufficient *prana* or vital energy, that healing is accomplished (Choa, 1990).

Physical science has not yet built adequate models for the existence of the aura, orgone energy, chakras, etheric body, or the astral body (Mishlove, 1975). Thus, we can only approach these from a psychological perspective.

According to Mishra (in Mishlove, 1975), chakras in yogic tradition, are not to be confused with any actual physical body. They are purely mental concepts which have been adopted as foci of concentration in yoga. Thus, the chakras are imaginary concepts used for reframing and focusing of attention in the process of suggestion.

Pranic healing is a suggestive method of healing characterized by its enactment of what is being suggested in the prescribed manner. Using the mode of communication of Pranic Healing Suggestion as the independent variable, this study intends to answer the questions:

1. Can Pranic Healing Suggestion be effectively used to alleviate asthma?
2. Does the mode of communication of Pranic Healing Suggestion differentially affect alleviation of asthma?

Pranic Healing Suggestion: Independent Variable

In pranic healing, the idea of chakras, aura, and bioplasmic body are brought into awareness by a creative thought process which influences the mode of mind. Govinda (in Mishlove, 1975) says,

Thinking is making. By the rhythmic repetition of a creative thought or idea, of a concept, a perception or a mental image, its effect is augmented and fixed until it seizes upon all organs of activity and becomes a mental and material reality (p. 242).

Ramacharaka (in Mishlove, 1975) describes pranic healing as a suggestive treatment. Suggestions are given to others, or to oneself as in autosuggestion, for healing. He writes that,

The healer must impress upon the patient's mind the desired conditions instead of the patients' doing it for oneself. Much better result may be obtained when the healer and the patient both co-operate in the mental image and when the patient follows the healer's suggestions in his mind and forms the mental images implied by the healer's words. The healer suggests that which he wishes to bring into the patient's instinctive mind, where they are taken up and afterwards manifested in physical result (p. 154).

The concept of suggestion can be approached from several angles (Schumaker, 1991). For instance, one can speak of the different methods or communication channels by which suggestions are conveyed. The most common of these are heterosuggestion (interpersonal suggestion) and autosuggestion (intrapersonal suggestion). Both methods can be used in Pranic Healing Suggestion (PHS). In heterosuggestion, a healer does it on the patient who cooperates by mentally following the suggested communication. In autosuggestion, one does it on oneself by physically doing the action. The present study uses the approach of heterosuggestion.

Thus, pranic healing is a suggestive method of treatment. Through the repetitive suggestion of the creative thought or concept such as the imagery of the gestures of cleansing and energizing of the affected chakras, the person's attention is focused, and thus, led into a subjective mode of mind when the communicated suggestion for healing is readily accepted by the unconscious mind and manifested in physical healing.

Gheorghiu (1989) proposes that suggestion involves a stimulus situation with a certain demand character or "guiding idea," which leads to a "deter-

mining tendency" to behave in certain ways. Such guiding ideas may be expressed in a social context through nonverbal stimuli, through moods that are demonstrated, or through words. They may occur in unstructured ambiguous situation upon which the individual imposes some meaning or organization.

According to Bowers and Kelly (1979) the combination of aptitude and attitude permits the person to become uncritically and imaginatively absorbed in the information received, neither purposefully complying nor interfering with its intended effect. Second, not only is a suggestion received in an uncritical manner, but enacted suggestions are typically experienced as something that happens to the person, rather than as something the person voluntarily does or performs (Spanos & Barber, 1974). This characteristic experience of hypnotic events as happening to the subject has been referred to by Hilgard (1977) as dissociation of cognitive controls.

Any suggestion has to be accepted *as if* there is no other possible way of interpretation, valuation, or behavior. By means of suggestive influences, an ambiguous situation is interpreted as if there is only one way of understanding. This is an important criterion for any suggestion to be effective (Gheorghiu & Kruse, 1991) which is accomplished in PHS through the well-structured meaning of chakras, energy and meanings prescribed to the gestures of cleansing and energizing.

Suggestion can have very powerful and amazing effects. Bloch (in Eysenck, 1991), the famous "wart doctor" of Zurich, used an impressive "wart-killing machine," with flashing lights, a noisy motor, and "powerful X-rays." He reported a high rate of success. Williard (in Eysenck, 1991), using suggestion, reported breast enlargement in 85 percent of women. Again, allergic reactions of skin was provoked by suggestion (Ikemi & Nakagawa in Eysenck, 1991). The effect of suggestion on asthmatics was investigated with significant results by McFadden, Luparello, Lyons, and Blecker (1969) and Weiss, Martin and Riley (1970).

The various components in suggestive methods have not been studied thoroughly. Stone and Lundy (1985) compared the effects of Erickson's indirect suggestion with direct suggestion and found that indirect suggestion was more effective in hypnotic condition while direct suggestion was more effective in nonhypnotic condition. They also found that subjects were more responsive to longer suggestions than shorter suggestions. Lynn, Neufeld, and Matyi (1987) found that suggestions which provide subjects with imaginative strategies tend to foster involuntariness relative to suggestions that do not provide such strategies. Matthews, Bennett, Bean, and Gallagher (in Lynn et al. 1987) reported that subjects who received indirect suggestions experienced greater depth of trance than subjects who received direct sug-

gestions. Thorne and Hall (in Stone & Lundy, 1985) compared "authoritatively worded" with "permissively worded" suggestion and reported no difference between groups.

Suggestion and hypnosis. The conceptual clarification of hypnosis and its relationship to suggestibility was made by Edmonston (1989). First, he demonstrated that suggestion and hypnosis are not the same, but rather that suggestion is enhanced by hypnosis. Second, that relaxation is the fundamental basis of hypnosis which, thirdly, can account for both the behavioral and subjective markers of hypnosis and the relationship between suggestion and hypnosis.

Orne (1959) described the essential feature of hypnosis as an altered state of consciousness in which a person can bypass objective reality. Bulatao (1987) presented hypnosis as a shifting of consciousness from the objective mode of mind to the subjective mode of mind. This enables the person to tolerate inconsistencies in logic and to experience as real what are, in fact, distortions of perception and memory.

Although many of those who write about suggestion relate suggestibility and hypnosis (Hilgard, 1991; Hilgard & Tart, 1966; Bowers & Kelly, 1979), Bernheim (in Schumaker, 1991) was one of the first investigators to offer an in-depth formulation for the workings of suggestion in the context of hypnosis. Bernheim's essential view of hypnosis was a state of enhanced suggestibility which is accepted by many others like Weitzenhoffer (1980) and Cardena and Spiegel (1991). It is also seen from the literature that the demarcation between hypnosis and suggestion is not clear. Although hypnotic-like behaviors are commonly responses to suggestion, the domain of suggestion includes responses that do not belong within hypnosis, and the phenomena of hypnosis cover more than specific responses to suggestion (Hilgard, 1991).

The earliest therapeutic use of hypnosis involved direct suggestions for symptom relief or attitude change. Symptom removal via suggestion has continued to be widely and successfully employed, particularly in the context of pain (Hilgard & Hilgard, 1975) and behavioral medicine (Bowers & Kelly, 1979). In these areas, therapeutic efficacy is correlated with the patient's ability to experience hypnosis indicating that hypnosis has specific effects on the problem.

Suggestion and imagery. Images offer a way of developing symbolic suggestions that may be particularly effective in creating psychological and physiological change under conditions of right hemisphere dominance. The role of right hemisphere in imagery production suggests the

importance of processes which facilitate right hemisphere dominance (Shea, 1991). The use of imagery (Green & Green, 1977; Achterberg, 1985) on cancer patients showed that the extent of recovery was significant for patients who imagined their immunological systems attacking tumors.

Individuals differ, too, in the sensory perceptual character or quality of their imagery. Some subjects reported either poor imagery or a complete absence of imagery. Subjects who "image" vividly described their imagery as if they were describing actual perceptions. The latter described image content as "seen" with reference to stimulus features, even though the stimulus object is physically absent. Therefore, one would expect a relationship between vividness of imagery and susceptibility to hypnosis (Sutcliffe, Perry & Sheehan 1970).

Several studies have shown the relation between imagery and hypnotic susceptibility. Palmer and Field (1968) reported a positive relationship between visual imagery and hypnotizability. They assume that relationship between hypnotizability and imaging ability is itself attributable, in some degree, to the underlying dimension of tolerance for regressive or unrealistic experiences which is an aspect of personality functioning.

A number of previous investigators have indicated an unstable relationship between imagery and hypnotic susceptibility. Some have found no relationship. And there are discrepancies between sexes across studies reporting a positive relationship (Perry, 1973). Sometimes high relationship has been carried by men (Sutcliffe et al., 1970), and other times by women (Palmer & Field, 1968; Hilgard, 1970). Perry (1973) argued that it is very difficult to predict hypnotic susceptibility from the knowledge that a person has vivid imagery, though there is a tendency among extreme scorers for medium- and high-susceptible subjects to have vivid imagery. The other factor for lack of relationship between imagery and hypnotic susceptibility are subjects' attitude, motivation, and expectancies toward the hypnotic situation. The traditional methods of assessing hypnotizability do not take such possible factors into account.

Other correlates of suggestion. A considerable amount of research has aimed to delineate specific variables that relate to suggestibility. Schumaker (1991) has summarized some of these variables which include age, sex, intellectual capacity, personality characteristics, and mental health status. Because most suggestibility tests are measures of hypnotizability, most of these variables have been studied in the context of hypnotic responsiveness. One of the most consistent findings concerning suggestibility is that it decreases

with *age*. Subjects in the 9 to 12 age range were the most suggestible, whereas those least responsive to suggestions were those 40 years of age and over. Intelligence does not seem to be a good indicator of suggestibility. Sex, as a variable, does not seem to interact consistently with measures of suggestibility. An overwhelming variable seems to be the sex of the person delivering the suggestion. For instance, greater responsiveness to sensory suggestion was shown when a person received suggestions from someone of the same sex (Gheorghiu & Kiel in Schumaker, 1991).

It can be seen from the above discussion that suggestion is a method of communication resulting in the acceptance with conviction of the communicated proposition in the absence of logically adequate grounds for its acceptance. Hence suggestion is a class of communication that is not the result of higher levels of cognitive monitoring control (Schumaker, 1991). Suggestions are given in various contexts, such as hypnosis (Hilgard & Hilgard, 1975; Bowers & Kelly, 1979), images (Green & Green, 1977; Achterberg, 1985), or through direct and indirect suggestions (Stone & Lundy, 1985), and they were found to be effective in healing ailments. Images, as used in PHS, offer a way of developing symbolic suggestions that may be effective in producing psychological and physiological changes under the activity of the nondominant right hemisphere of the brain (Shea, 1991). Suggestions with imaginative strategies, length of suggestion, and the mode of suggestion are some factors that vary the effectiveness of the suggested message (Stone & Lundy, 1985; Lynn et al., 1987).

Bronchial Asthma: Dependent Variable

Cecil and Loeb (1955) defined bronchial asthma as a chronic disease, manifested by characteristic form of wheezing, dyspnea and secretion of thick tenacious sputum. Typically, it occurs in proxysmal recurrences with intervals of relative comfort, but may also assume a mild continuous form with exacerbations; or the acute attack may persist for days or weeks. Kaplan and Sadock (1991) define bronchial asthma as a chronic recurrent obstructive disease of the bronchial airways which tend to respond to various stimuli by bronchial constriction, edema, and excessive secretion. Genetic factors, allergic factors, infections, and acute and chronic stress all combined produce the disease.

Asthma is currently being recognized as a problem characterized by a hyperactive immune response (Hokoma & Nakamura, 1982). From the immunological point of view, asthma usually involves a hyper-irritability of

the bronchial mucosa in the lungs with eosinophils which comprise three percent of the white blood cell count. According to Bowers and Kelly (1979), there seem to be three major ways in which the immunological system can place the person in peril. The immune system can be hyperactive, underactive, or misguided in its attempt to guard the body against the assault of foreign body. Bronchial asthma is the disease of hyperactivity of the immune system. The release of histamine by various cells of the body is a normal defensive response. It helps to localize an infection by surrounding it with an inflammatory response, and in general histamine expedites the healing of wounds (Frick, 1976). So, in the case of allergic responses, we have an exaggeration of an immunological defense reaction that can seriously threaten the life of the person being "protected."

Characteristics related to diagnosis and measurement of asthma. Any study of asthma would have to describe the characteristics of (a) intermittency, (b) severity, and (c) reversibility of asthma (Creer, 1979). *Intermittency* refers to the frequency of asthma attacks suffered by a patient. Hence, a patient may suffer attacks on a periodic basis over the year. The intermittency of asthma presents a number of problems including difficulties in defining what constitutes a specific attack to deciding how long a patient should be monitored after the application of an intervention strategy (Creer, 1979).

The second characteristic refers to the *severity* of asthma attacks from mild episodes characterized by a feeling of tightness in the chest or a slight wheeze, to status asthmaticus which can result to death. The fact that attacks vary in severity from episode to episode within the same person also presents assessment questions to the behavioral scientists. Creer (1982) concluded that there is no standard way of classifying patients as suffering from mild, moderate, or severe asthma or of categorizing an attack as mild, moderate, or severe.

The characteristic of *reversibility* denotes that the airway obstruction that constitutes an asthma attack can reverse either spontaneously or with adequate treatment. The reversibility component of the disorder differentiates the condition from other types of chronic respiratory condition. The ability of attacks to spontaneously remit creates an assessment problem, particularly when the aim of the investigator is to measure the effect of a particular intervention technique on asthma. Spontaneous remission should be ruled out as a possible, perhaps probable, explanation before the success can be attributed to the treatment.

Several successful studies have been reported using *hypnosis* on asthma patients (Hanley, 1974; Moorefield, 1971; Maher-Laughan, 1970; Collison, 1975; Lehrer, Sargunraj & Hochron, 1992). Of the 38 studies from 1967 to 1977 which are reviewed by DePiano and Salzberg (1979) using hypnosis on headache, skin diseases, and asthma, 17 were done on asthmatics, 15 (88.2 percent) of them reporting positive results. Meditative relaxation (Kunnumparam, 1994) and biofeedback techniques (Visser, 1976) were used to manage the stress associated with asthma as well as for the alleviation of it.

Effectiveness of hypnotic treatment appears to be a function of which outcome measures are employed. When self report is used, most investigators report an improvement in the patient's symptoms. However, physiological measures show more equivocal results (DePiano & Salzberg, 1979).

It is seen from this review that bronchial asthma is a chronic recurrent obstructive disease of the bronchial airways which tend to respond to various stimuli. The major problem for a researcher is the choice of measurements of asthma because of its characteristics of intermittency, severity, and reversibility (Creer, 1979).

The present study approaches the problem from the perspective of hypnosis and suggestive methods for the alleviation of asthma.

Conceptual Framework

Pranic Healing Suggestion is a method of accessing the unconscious mind for the purpose of healing ailments. Through the repetitive suggestion of the creative thought process such as the imagery of the gestures of cleansing and energizing the affected chakras, the person's attention is focused on, and is led into a subjective mode of mind when the suggested message for healing is readily accepted by the unconscious mind and manifested in physical healing.

As the person is relaxed while seated on the chair, eyes closed, with palms upwards on the knees, and breathing normally and rhythmically, the experimenter invokes Divine assistance for healing. Through this induction process, the person enters in an altered state of consciousness, which is the essential process of hypnosis in which a person can bypass objective reality (Orne, 1959). This, according to Orne, enables the person to tolerate inconsistencies in logic and to experience as real what are, in fact, distortions of perception and memory.

When the suggestion of cleansing the diseased energy from the affected chakras and energizing them with the healing energy is communicated to the person verbally or nonverbally through gestures, the person experiences the energy as real without critical thinking. Suggestion is a method of communication resulting in the acceptance with conviction of the communicated proposition in the absence of logically adequate grounds for its acceptance (McDougall in Schumaker, 1991). Hence, suggestion is a class of communication that is not the result of our higher levels of cognitive monitoring control (Schumaker, 1991).

Any suggestion has to be accepted as if there is only one way of interpretation (Gheorghiu & Kruse, 1991). By means of focusing the attention on the symbolic chakra centers and sweeping away the diseased energy into a waste disposal unit and re-energizing them with healthy energy, the message is clearly interpreted to the person. Further, the enacted Pranic Healing Suggestion is typically experienced as something happening to the person, rather than as something the person voluntarily does or performs which is referred to by Hilgard (1977) as dissociation of cognitive controls. This dissociation allows the person to isolate and suppress the “conscious monitoring authority” (Gheorghiu, 1989) in such a way that the person becomes potentially responsive to suggestion that would otherwise be rejected by that authority.

Likewise, suggestion might be verbal and nonverbal in nature. Nonverbal suggestions require that certain additional cognitive functions (most notably, sight) play a role when a person receives, and makes a response to a suggestion. Some might also claim that nonverbal suggestions, by their very nature, are more ambiguous than verbal suggestions (Schumaker, 1991). Because other studies have not been done on this mode of suggestion, the present study intends to investigate the differential effect of Pranic Healing Suggestion communicated verbally and nonverbally through gestures as it is usually done in the practice of pranic healing.

Hypotheses

From the above discussions follow the hypotheses:

1. Pranic Healing Suggestion can be effectively used to alleviate asthma.
2. Verbal and nonverbal modes of communication of Pranic Healing Suggestion are equally effective in the alleviation of asthma.

Method

The independent variable (IV) of the study is the mode of communication of Pranic Healing Suggestion (PHS). In order to find the effects of verbal and nonverbal modes of communication of PHS on asthmatics the IV is manipulated as:

1. PHS with gestures and words (verbal and nonverbal);
2. PHS with gestures alone (nonverbal);
3. PHS with words alone (verbal); and
4. no PHS (control group).

The nonverbal mode of communication is achieved through the application of PHS by the anticlockwise movement of the experimenter's hand 10 times along the contours of the bioplasmic body and the affected chakras to "sweep away" the diseased bioplasmic body and flicking the hand each time into a waste disposal unit, and then energizing the chakras by the clockwise movement of the hand three times on each affected chakra. The verbal communication of PHS is done using words to communicate the cleansing and energizing actions. Thus, (a) in PHS with gestures and words, sweeping and energizing gestures are done as the experimenter communicates in words the meaning of the gestures, (b) in PHS with gestures alone, the words are not spoken to the subjects and the concepts of PHS are not taught to them, they form the mental imagery of the gestures merely from the gestures done on them, and (c) in PHS with words alone, the subjects follow the imagery of the gestures in their minds, as it is explained by the experimenter.

The Dependent Variable (DV) is the alleviation of asthma which is measured in four different ways:

1. frequency of attacks per month;
2. duration of asthma attacks in minutes per week;
3. number of times medication taken per month; and
4. global impression of severity of illness per week as reported by the subject on a scale of 0 to 4 where, 0 – is feeling very well, 1 – is feeling well, 2 – is feeling somewhat well, 3 – is feeling ill, and 4 – is feeling very ill.

Although these measures are interrelated, the primary measure of asthma is frequency of attacks whereas others are the secondary measures. The goal of the intervention is to minimize the symptoms of asthma which will show the maximum significance of the intervention.

Hypotheses in Operational Terms

1. Pranic Healing Suggestion (PHS) with gestures and words can help to alleviate asthma.
2. PHS with gestures alone can help to alleviate asthma.
3. PHS with words alone can help to alleviate asthma.
4. PHS with gestures and words, PHS with gestures alone, and PHS with words alone will be equally effective in the treatment of asthma.

Subjects

The subjects of the study are girls of St. Joseph's Higher Secondary School, Nagercoil, India. With the permission of the school authorities, all the students who suffer from asthma are requested to meet the experimenter. The experimenter then explains to them briefly what would be offered in pranic healing sessions. Ninety students volunteered to undergo the treatment and their asthma level is measured for four weeks which is the pretreatment period. Out of the 90 students, 34 are found to have three or more attacks during the four-week period and, therefore, they are chosen to be the subjects of the study. They are from standards 6 to 12 belonging to the age group of 10 and 17 (Mean age = 13.05, SD = 1.61).

The students are from middle and lower middle class socioeconomic strata of the society and various religions. The PHS sessions used Tamil, the mother tongue of the subjects, as the language of communication.

The 34 students chosen for the treatment intervention are randomized into four groups. First, the subjects from standards 6 to 8, who have 10 or more asthma attacks during the pretreatment period are randomly divided into four groups. Similarly, the subjects from standards 9 to 12 who had 10 or more asthma attacks are randomly divided into four groups. The remaining subjects are randomized according to the number of attacks and the standards they belong to. Thus, it is seen that the 4 groups are comparable on frequency of asthma attacks and age. Whereas, the comparability is not assured on other DV measures. Finally, the four groups are randomly assigned to the treatment groups.

Instruments

The study follows the instructions of pranic healing for asthma as postulated by Choa (1992) which is explained in the procedure and in Appendix A. A basin of salt water is used as a waste disposal unit, which is believed to absorb and destroy the diseased bioplasmic body. PHS is given to all the subjects in the same room.

The students are given a recording sheet to record their daily symptoms of asthma on all DV measures for accuracy of recording against experimenter bias (see Appendix B). The scores are then summarized and recorded every week by the experimenter.

Design

This study uses the format of the small-n design following the ABA' condition, where A is the pretreatment phase or baseline measure, B is the treatment phase, and A' is the posttreatment phase. Measurements are taken weekly for each DV measure during the three treatment phases.

The major experimental design of the study is the within subjects design using each experimental group as its own control, which controlled for the extraneous physical and personality variables.

The four randomized group design comparing the treatment groups with the control group, as seen in Table 1, is also used here (Ramos, 1986). Through the use of a control group, such threats of internal validity as history and maturation are automatically controlled in the design itself.

The subjects are divided into four independent groups; two groups of eight subjects and the other two groups of nine subjects each. During the experimental intervention (X), group one is given PHS with gestures and words; group two with gestures alone; group three with words alone, and group four is given no treatment (control group). Observations (O1, O2, and O3) are taken from all the three groups during the pretreatment phase (A) of four weeks, treatment phase (B) of five weeks, and posttreatment phase (A') of five weeks, respectively. Posttreatment phase has two observations—immediate (1 week) and delayed posttreatment phase (4 weeks). The 14-week duration of the experimental period is necessary to account for the characteristic of reversibility of asthma.

Procedure

The entire experiment was conducted from July to October 1994 for 14 weeks. The general pattern of the procedure is as follows.

- | | |
|------------------------|-------------------------------|
| 1. Pretreatment phase | 4 weeks |
| 2. Treatment phase | 5 weeks |
| a. PHS training | 1 session (30 minutes) |
| b. PHS treatment | 10 sessions (15 minutes each) |
| 3. Posttreatment phase | 5 weeks |
| a. Immediate | 1 week |
| b. delayed | 4 weeks |

Table 1. Four Randomized Groups Design (The Experimental Groups Using Within Subjects Design in the Model of ABA' Design).

Pretreatment (4 Weeks)	Treatment (5 Weeks)	Posttreatment	
		Immediate (1 Week)	Delayed (4 Weeks)
Phase A O1	Phase B X Group 1 (n1=8) Group 2 (n2=9) Group 3 (n3=8) Group 4 (n4=9)	<— Phase O2	A' —> O3

During the training session, the subjects in groups one and three are trained in the terminology and concepts of pranic healing so that they can understand and follow the imagery of PHS. The subjects in group two follow the mental imagery suggested through the gestures alone. In all the treatment conditions, PHS is given to each subject twice a week during the treatment phase. Each session lasts for about 15 minutes. The subject is requested to sit on a chair, relax and breath normally and regularly. In order to monitor the progress made by the subjects during the treatment phase, measures of dependent variables are taken weekly, beginning the third week of the treatment phase.

The following procedures are used in each treatment session. The subject is requested to relax on a chair, with palms upwards on the knees, and breathing normally and regularly. The experimenter, then, invokes Divine assistance to the healing process (see Appendix A). All the subjects voluntarily closed their eyes and remained so for most part of the session. Then the experimenter cleanses and energizes the whole body and the affected chakras, sweeping away the diseased energy by about 10 anticlockwise motion of the hand and energizing them with the healing energy by three clockwise motion. The words used in groups one and three are given in Appendix B. No words are used in group two apart from the invocation of Divine assistance.

Results

First, one-way analysis of variance (ANOVA) was done on the four groups to assess if they are not significantly different at pretreatment level. Table 2 shows that groups are not significantly different at pretreatment level on frequency, medication and severity of illness. Because the scatterplot on the duration of attacks in minutes reveals that the distribution

of the scores is not a normal distribution, it was analysed using appropriate nonparametric tests. Test of significance by Kruskal Wallis one-way ANOVA shows that the groups are not significantly different on duration of attacks also ($KW = 2.966$, $p < .05$, $X(3) = 7.82$).

Then, the descriptive analysis of the results was performed on all the measures of DV. Figures 1 to 4 present the mean scores of the measures of DV at pretreatment and posttreatment levels.

Based on the frequency of attacks, which is the primary measure of asthma, the proportion of improvement for each subject is computed. It is observed that 17 out of 25 subjects treated with PHS are free of asthma at immediate posttreatment period, and an overall proportion of .9 as improvement for all the subjects; 19 out of 25 subjects are free of asthma at delayed posttreatment period, and an overall proportion of .93 as improvement for all the subjects; and two out of nine subjects of the control group are free of asthma at delayed posttreatment period.

Table 2. One-Way ANOVA for the DV Measures at Pre-treatment Level for the Four Independent Groups.

DV measures	Grp1 (ges+wo)	Grp2 (ges)	Grp3 (wo)	Grp4 (ctrl)	F values
Frequency					
Mean	7.5	7.11	7.37	7.22	0.008
SD	5.73	5.33	4.37	5.95	
Medication (# of times)					
Mean	4.13	8.78	8.0	7.56	0.276
SD	4.52	17.99	6.85	9.46	
Severity (0-4 scale)					
Mean	2.38	2.58	2.69	2.39	0.242
SD	0.76	0.85	1.12	0.82	

$F(3, 31) = 2.91$, $p < .05$.

Note. ges = gestures, wo = words, ctrl = control.

Table 3 presents the proportion of improvement on all DV measures at delayed posttreatment period. It shows that the proportion of improvement

P - Pretreatment Mean
 I - Immediate Posttreatment Mean
 D - Delayed Posttreatment Mean

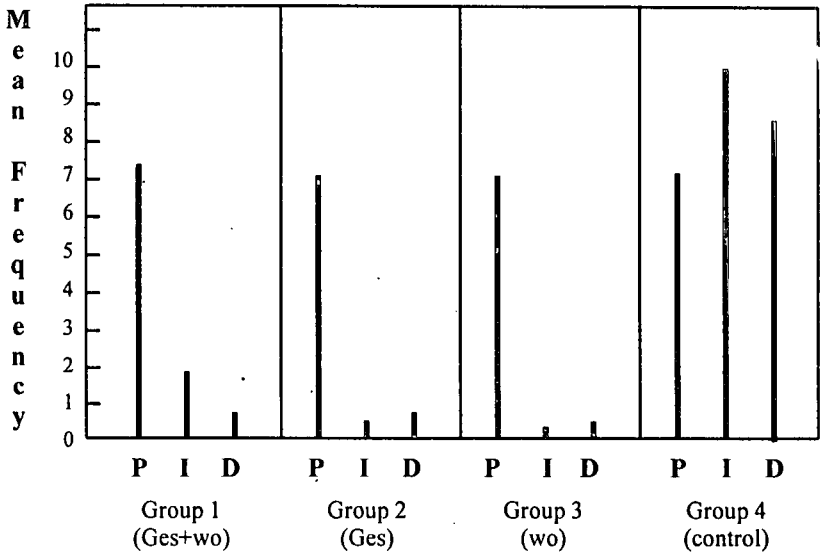


Figure 1. Mean frequency of asthma attacks per month.

P - Pretreatment Mean
 I - Immediate Posttreatment Mean
 D - Delayed Posttreatment Mean

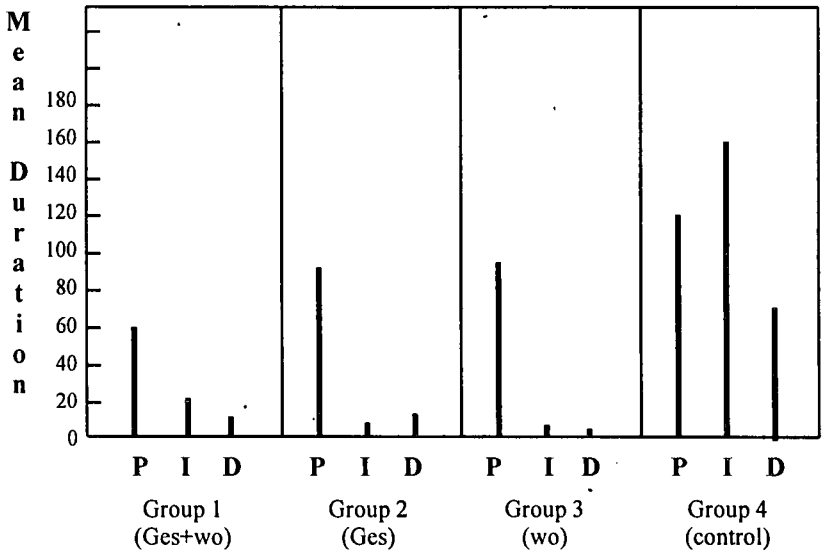


Figure 2. Mean duration of asthma attacks in minutes per week.

- P - Pretreatment Mean
- I - Immediate Posttreatment Mean
- D - Delayed Posttreatment Mean

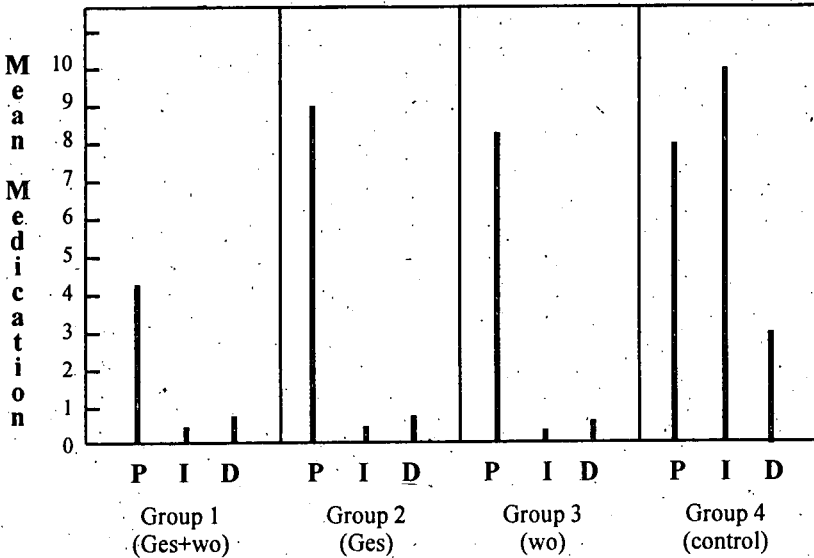


Figure 3: Mean number of times medication taken per month.

- P - Pretreatment Mean
- I - Immediate Posttreatment Mean
- D - Delayed Posttreatment Mean

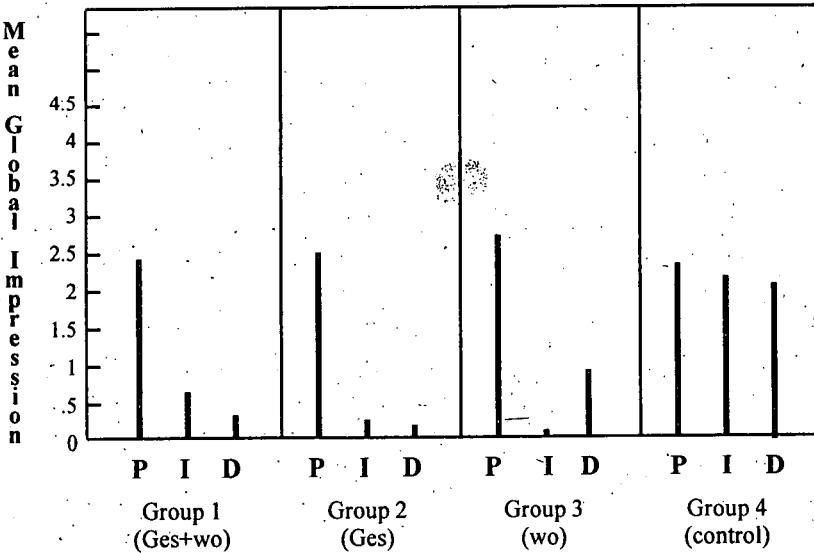


Figure 4: Mean global impression of severity of illness

for all the treated groups is between .82 and .97. The control group shows a proportion of (-.06) as worsening in frequency of asthma attacks; a proportion of (.54) as improvement in duration of attacks; a proportion of (.66) as improvement in medication; and a proportion of (.07) as improvement in global impression of severity of illness.

Table 3. Proportion of Improvement for the DV Measures at Delayed Posttreatment Period (N = 34).

DV	Group 1 (ges+wo)	Group 2 (ges)	Group 3 (wo)	Group 4 (ctrl)
Frequency	.92	.92	.95	-.06
Duration	.87	.87	.97	.54
Medication	.82	.92	.95	.66
Severity	.86	.93	.97	.07

Correlated Samples

The experimental design was a within groups design, thereby assessing the effectiveness of the PHS treatment on asthmatics. Table 4 shows the findings of all the 25 subjects treated with PHS in all modalities. There is a significant improvement ($p < .05$) in frequency of attacks, medication, and global impression of severity of illness at immediate and delayed posttreatment periods.

Test of significance (Wilcoxon Signed Rank Test) for the difference between pretreatment and posttreatment measures on duration of attacks for all the treated subjects gives significant improvement ($p < .05$) at both immediate and delayed posttreatment periods.

The separate analysis of each group (see Table 5) shows that the first group that had the PHS with gestures and words shows significant improvement ($p < .05$) in frequency, medication, and global impression of severity of illness. The second group that had PHS with gestures alone shows significant improvement ($p < .05$) in frequency and global impression of severity of illness, whereas no significant improvement is shown in medication. A look at the raw scores on medication in the second group at pretreatment period shows that the score '56 is an extreme score. Hence, another within group analysis is done after deleting this particular subject's scores and found out that there is a significant improvement after the treatment at delayed posttreatment period ($p < .05$, t value = 2.487). The

third group which had PHS in words alone shows significant improvement ($p < .05$) in frequency, medication and severity. The control group does not show significant improvement on these measures.

Table 4. Test of Significance for the Difference Between Pretreatment and Post-treatment Measures for all the Treated Subjects (N = 25).

DV Measures	t values	
	(Immediate)	(Delayed)
Frequency	7.557 *	6.977 *
Medication	2.900 *	2.839 *
Severity	12.117 *	12.822 *

* $p < .05$, $t(24) = 1.711$.

Table 5. Test of Significance for the Difference Between Pretreatment and Posttreatment Measures for Each Group.

Group	DV Measure	t values	
		(Immediate)	(Delayed)
1 (ges+wo)	Frequency	4.548 *	3.763 *
	Medication	2.437 *	2.553 *
	Severity	7.514 *	9.076 *
2 (ges)	Frequency	3.685 *	3.323 *
	Medication	1.375	1.344
	Severity	8.083 *	7.217 *
3 (wo)	Frequency	5.064 *	5.187 *
	Medication	3.386 *	3.553 *
	Severity	6.793 *	6.866 *
4 (ctrl)	Frequency	1.32	0.291
	Medication	0.599	1.822
	Severity	0.191	0.272

* $p < .05$, $t(7) = 1.895$; $t(8) = 1.86$.

Table 6 shows significant improvement ($p < .05$) in duration of attacks for all the subjects treated with PHS. The control group also shows significant improvement at delayed posttreatment period.

Table 6. Test of Significance (Wilcoxon Signed Rank Test) for the Difference Between Pretreatment and Posttreatment Measures per Group on Duration of Attacks.

Group	p values	
	Immediate	Delayed
1 (ges+wo)	.0039 *	.0039 *
2 (ges)	.0039 *	.002 *
3 (wo)	.0039 *	.0039 *
4 (ctrl)	.4551	.0273 *

* $p < .05$.

Two Independent Groups

In order to analyze the effectiveness of the PHS therapy on asthmatics the difference of points between pretreatment and posttreatment periods in groups 1, 2 and 3 was compared to the difference of points in the control group through the analysis of student's t test for independent groups. At immediate posttreatment level, all the PHS groups show significant improvement ($p < .05$) in frequency and global impression of severity of illness (see Table 7).

Table 7. Test of Significance for the Difference of Points at Immediate Posttreatment DV Measures.

DV Measures	Group 1 & 4	t values	
		Group 2 & 4	Group 3 & 4
Frequency	3.304 *	3.381 *	3.739 *
Medication	1.473	1.493	2.368 *
Severity	3.442 *	4.296 *	4.24 *

* $p < .05$, $t(15) = 1.753$, $t(16) = 1.746$.

Note. Group 1 = Gestures + Words, Group 2 = Gestures, Group 3 = words, Group 4 = control.

The third group with PHS in words alone shows significant improvement ($p < .05$) on medication.

At delayed posttreatment period, groups 1, 2, and 3 show significant improvement ($p < .05$) in frequency of attacks and global impression of severity of illness, whereas none of the group has significant improvement in medication (see Table 8).

It is observed in Table 9 that there is a significant improvement ($p < .05$) in duration of attacks at immediate posttreatment period for all the treated groups, but there is no significant improvement at delayed posttreatment period.

Table 8. Test of Significance for the Difference of Points at Delayed Posttreatment DV Measures.

DV Measures	t values		
	Group 1 & 4	Group 2 & 4	Group 3 & 4
Frequency	3.096 *	2.805 *	3.61 *
Medication	0.512	0.469	0.74
Severity	2.939 *	3.192 *	3.27 *

* $p < .05$, $t(15) = 1.753$, $t(16) = 1.746$.

Table 9. Test of Significance (Wilcoxon-Mann-Whitney Test) for the Difference of Points on Duration of Attacks.

Posttrt period	Group 1 & 4	Group 2 & 4	Group 3 & 4
Immediate	.018 *	.0252 *	.0028 *
Delayed	.1088	.129	.1088

* $P < .05$.

Multiple Independent Groups

To analyze the significant difference in the modes of communication of PHS, the difference of points in frequency, medication, and severity of attacks for each group after the PHS therapy was analyzed using ANOVA for groups 1, 2, and 3 at immediate posttreatment level (see Table 10), and at delayed posttreatment level (see Table 11). The difference of points in duration was analysed by Kruskal-Wallis one-way ANOVA (see Table 12). The results show that the groups are not significantly different at immediate and delayed posttreatment periods. This leads to the conclusion that there is no significant difference between PHS treatment with gestures and words, PHS with gestures alone, and PHS with words alone.

Table 10. Comparison of Difference of Points for Groups 1, 2, and 3 at Immediate Posttreatment Period.

DV measures	Group 1 (ges+wo)	Group 2 (ges)	Group3 (wo)	F value
Frequency				
Mean	5.75	6.78	7.13	0.204
SD	3.58	5.52	3.98	
Medication (# of times)				
Mean	3.63	8.33	7.88	0.396
SD	4.21	18.19	6.58	
Severity (0-4 scale)				
Mean	1.84	2.33	2.56	1.414
SD	0.64	0.87	1.07	

$F(2, 22) = 3.44, p < .05.$

Correlation of Dependent Variable Measures

To assess the correlation of the four DV measures, a Pearson r analysis was done on the scores at pretreatment, immediate posttreatment and delayed posttreatment periods. It is seen from Table 13 that there is a consistent and high correlation between frequency and severity of illness ($r > .62$), and frequency and duration ($r > .676$) at all the three periods of the DV measures. Medication is not consistently and highly correlated with any other DV measures.

Table 11. Comparison of Difference of Points for Groups 1, 2, and 3 at Delayed Posttreatment Period.

DV measures	Group 1 (ges+wo)	Group 2 (ges)	Group 3 (wo)	F value
Frequency				
Mean	6.88	6.56	7.0	0.017
SD	5.17	5.92	3.82	
Medication (# of times)				
Mean	3.38	8.11	7.63	0.412
SD	3.74	18.1	6.07	
Severity (0-4 scale)				
Mean	2.16	2.39	2.59	0.469
SD	0.55	0.99	1.07	

$F(2, 22) = 3.44, p < .05.$

Table 12. Comparison of Difference of Points by Kruskal Wallis One-way ANOVA on Duration of Attacks.

Posttreatment period	Group 1 (ges+wo)	Group 2 (ges)	Group 3 (wo)	KW value
Immediate:				
Mean	40.31	82.5	93.28	3.7483
SD	24.99	51.93	87.45	
Delayed:				
Mean	51.09	76.14	94.22	2.7048
SD	32.07	37.91	88.05	

$p < .05$, $X(2) = 5.99$.

Table 13. Pearson r Correlation Matrix for all the DV Measures at Pretreatment, Immediate and Delayed Posttreatment Periods.

	Duration	Medication	Severity
Frequency			
Pre.	.678	.068	.620
Imm.	.767	.611	.870
Del.	.755	.317	.841
Duration			
Pre.		.198	.457
Imm.		.622	.549
Del.		.682	.863
Medication			
Pre.			.323
Imm.			.743
Del.			.660

Discussion

Considering the overall effect of the PHS treatment, the results can be summarized as follows. Out of 25 subjects 24 show a proportion of (.93) as improvement in the frequency of asthma attacks which is the primary measure of the dependent variable. The findings of the within subjects experimental design which is the major design of the study support this result showing significant improvement ($p < .05$) in frequency, duration, medication, and global impression of severity of illness for both immediate and delayed posttreatment means. The separate analysis of each group treated with different modalities of PHS also shows significant improvement ($p < .05$) in frequency, duration, and global impression of severity of illness at posttreatment periods. On medication, group 1 shows significant improvement with $p < .05$, and group 2 shows significant improvement with $p < .05$ at delayed posttreatment period after deleting the extreme score, and group 3 shows significant improvement with $p < .05$.

The findings from the independent group analysis, which is the secondary design of the experiment, confirm the above findings. Significant improvement ($p < .05$) is noted in frequency and global impression of severity of illness for all the three PHS groups on both immediate and delayed posttreatment periods as compared to the control group. At immediate posttreatment period all the three groups show significant improvement ($p < .05$) on duration of attacks. Group 3 likewise shows significant improvement ($p < .05$) on medication at immediate posttreatment period. Comparison of the means of the three PHS treatment groups reveals that there is no significant difference between the groups treated with different PHS modalities.

Because the within subjects analyses show significant improvement in asthma symptoms on all DV measures and the independent groups analyses show significant improvement on frequency and global impression of severity of illness, the hypotheses are supported: (a) the PHS treatment can help alleviate asthma, and (b) the verbal and nonverbal modes of communication of PHS are equally effective in the alleviation of asthma.

The results obtained from this study can be understood from various theories. First, when a person is in the subjective mode of mind or ASC, the mind-generated thoughts and imagery of PHS are easily accepted by the brain, effecting cognitive as well as physiological changes such as healing ailments. In this subjective mode of mind, a person can tolerate inconsistencies in logic and contradictions of previous learnings such as the concept of "sweeping away" the diseased energy by the circular motion of the hand and re-energizing the affected parts with positive energy, and thus experience *as real* what is being suggested.

In this study, the imagery of the concepts of PHS like the chakras, sweeping and energizing the chakras seem to be the real factor which effected in ASC and healing. The concept of PHS is given in three different modes – with gestures and words, with gestures alone, and with words alone. All the three groups show significant improvement, which concludes that the communication of the imagery of PHS which is common to all the three groups is the real factor that effected the healing process. This finding is in agreement with the study of Lynn et al. (1987) who found out that suggestions which provide subjects with imaginative strategies that encourage goal-directed imaginations tend to foster involuntariness relative to suggestions that do not provide such strategies. PHS, with its qualities of directness, length of suggestion through repeated sessions, and goal-directed imaginative strategies, augment the healing process in the subject.

The effectiveness of PHS can also be explained from the findings of brain asymmetry. In a review of studies of brain asymmetry, Shea (1991) summarized the increased involvement of the right hemisphere in altered states of awareness, hypnosis, transcendental meditation, visual tasks, listening to music and stories, and with experiences rated high on “imagery” and “affect.”

In verbal communication of PHS given to groups 1 and 3, the left hemisphere could have been more involved at first, in processing the verbatim. But in the subsequent sessions, this is not necessary as they already know the imagery of the PHS concepts, and, thus, the right hemisphere becomes automatically activated during the PHS session. In the communication of PHS with gestures the critical and analytical thought process of the left brain is bypassed by the sensory cues (visual) of the gestures which is directly communicated to the right hemisphere (RH), and, thus, allowing the RH to be activated. Though the subjects closed their eyes during the treatment, the imagery of the gestures is seen in their minds. Thus, in all the three groups the nondominant right hemispheric activity is present.

The unconscious processes in terms of cognitive and emotional changes experienced by the subjects during the PHS treatment had not been quantified. From the researcher's personal observation and the subjects' report, it is clear that they have become more confident in the management of the disease without fear and anxiety over an impending attack. Some of them are able to attribute their tension to the conflicts in life such as examinations and sibling rivalry. Thus, it can be asserted from these observations that the subjects experience emotional relief and self-confidence from the treatment apart from the relief they experience from the asthmatic symptoms.

A few unexpected results are obtained. For the within subjects analysis, the second group does not show significant improvement in medication, and the control group shows significant improvement ($p < .05$) in duration at delayed posttreatment period. The independent group analysis shows no significant improvement in duration of attacks and medication at delayed posttreatment period for the three PHS treatment groups. Also, groups 1 and 2 do not show significant improvement in medication at immediate posttreatment period.

Because all the four DV measures, (i.e., frequency of attacks, duration of attacks, number of times medication taken and the global impression of severity of illness) are measuring the same dependent variable, correlation among the measures is expected. But it is observed from the correlation matrix (see Table 13) that medication does not correlate with other DV measures consistently which means that medication changed unpredictably with the treatment. Again, observation of the raw scores reveals that 10 of 34 subjects are not taking any medication, pointing to the fact that this measure is not applicable to them. Also seen is that one subject in the second group took medication 56 times as a precaution against asthma even though she had only three attacks during that period. This indicates that the fear of an impending asthma attack is a possible factor at pretreatment period. The analysis after deletion of this extreme score gives significant result. The unwanted variability of the scores on medication can probably be attributed to the SES of the subjects. It is desirable that, whenever possible, a homogeneous group of subjects be chosen for further studies.

The control group shows significant improvement ($p < .05$) on duration of attacks at delayed posttreatment period, and hence, the comparison of treatment groups with control group does not show significant improvement on duration of attacks (see Table 9). In this study, duration of attacks is chosen as one of the secondary measures because reliability of this measure is not without problem. It is observed from the review of literature that by the very nature of asthma, the severity of attacks measured by duration vary randomly (Creer, 1982). Because there is improvement in the alleviation of frequency of asthma attacks which is the primary measure of asthma, this probability of random variation explains the nonsignificant result on duration. Secondly, the groups were not matched according to the type of asthmatics. One possible solution is to match the groups according to the duration of attacks, although Creer (1982) concludes that there is no standard way of classifying patients as being mild, moderate, or severe asthmatics because the severity varies from episode to episode. Hence, the present study again points out the problem of unwanted variability in the observations when duration is chosen as the measure of asthma.

Compared to other studies done for the alleviation of asthma, PHS treatment is as effective as shown in the previous studies. It is significant to note that 17 of the 25 subjects became free of asthma attacks at immediate posttreatment period, showing an overall proportion of (.9) as improvement for all the subjects. At delayed posttreatment period, 19 of the 25 subjects became free of asthma attacks, showing an overall proportion of (.93) as improvement for all the subjects.

The study of Kunnumpuram (1994), using vipassana meditative relaxation therapy, reported an overall improvement of 90.45 percent in asthmatic symptoms. Other previous studies using hypnosis on asthma management and symptom reduction have reported an improvement of 60 to 80 percent (Collison, 1975; DePiano & Salzberg, 1979; Lehrer et al., 1992).

In this study of PHS on asthmatics, many of the experimental defects are remedied in the design itself, using a combination of small-n, within subjects, and independent groups designs with randomly assigned control group (Ramos, 1986). The therapeutic procedure is clearly defined through the use of PHS treatment by Choa (1990) and using the same concept of pranic healing for all the groups.

The goal of some of the investigations (Maher-Laughan, 1970; Moorefield, 1971; Hanley, 1974; Collison, 1975) is to alter the patient's perception of their symptoms so as to reduce the stress related to the symptoms and thereby reduce the intensity of the symptoms themselves (DePiano & Salzberg, 1979). In this study, the subjects begin to feel confident that they are able to manage their asthma attacks after they have experienced symptom reduction.

The effect of suggestion in healing ailments has been studied with amazing results, but various components of suggestion have not been adequately studied. The present study investigates the effect of verbal and non-verbal modes of communication of suggestion and finds that both are equally effective in alleviation of asthma. Stone & Lundy (1985) and Lynn et al. (1987 & 1988) studied direct and indirect suggestions in the context of hypnosis. Stone and Lundy found that subjects are more responsive to longer suggestions than short ones. PHS can be considered as a long suggestion because each subject receives about 150 minutes of suggestion during the ten sessions. Lynn et al. (1987) conclude that suggestions that provide imaginative strategies that encourage goal-directed imaginations tend to foster better results, and direct suggestions facilitate the subjective experience of hypnosis. All the above-mentioned studies are done in the context of altered state of consciousness.

The following clinical implications are drawn from the findings of this research.

1. This study shows the effectiveness of PHS in the treatment of psychosomatic illnesses, particularly asthma, and provides an empirical support and theoretical understanding to this ancient, now popular method of healing. PHS provides an alternative remedy for management and healing of asthma. It is easy to learn and can be practised by all. Because it taps the body's own innate healing power, it strengthens the body-mind interrelatedness and conditions the body to fend for itself.
2. From the previous studies as well as the present study, one observation that can be established is that any method – be it meditation, relaxation, hypnosis, imagery, or suggestion through gestures or words – that leads the patient to an altered state of consciousness is effective across age and gender in activating the innate healing power.
3. Although there are many methods used to lead the person to attain ASC, some methods are more effective for some patients than others, probably depending on the previous learning patterns and the schema of the person. Hence, it calls for a skillful therapist to appropriate the various methods to the responsiveness of the patient.
4. From the theoretical framework of PHS it can be understood that the imagery of cleansing and energizing the chakras is not specifically applicable to the disease of asthma alone, and hence, PHS can be said to be effective for other psychosomatic diseases too. Again, the innate healing power of the human body works not only for psychosomatic diseases but also for any other diseases of the body. Therefore, it can be generalized that if PHS is effective in alleviating asthma, it will be effective in the alleviation of any other disease.
5. The result that verbal and gestural modes of communication of PHS are equally effective in healing asthma, is an important finding in heterosuggestion and autosuggestion. In heterosuggestion, PHS can be used without gestures when doing the gestures become tedious. Gestures can be used effectively for those patients who are unable to concentrate their attention on the presented imageries of PHS due to emotional disturbance. The performance of the gestures by another person can help to communicate the suggested message to the unconscious mind, and direct their imagination along PHS

concepts. Thus, both modes can be appropriately used depending on the patient's need.

6. In autosuggestion, PHS with gestures can be used by doing the gestures on oneself. PHS with words becomes easier when ailments, like asthma, leave the person alone and helpless. One can help oneself by guiding one's imagination with the strategies and concepts of PHS and mentally cleansing and energizing the affected chakras. Because the mental imagery of the gestures of PHS is the factor, and not the performance of the gestures itself that facilitates ASC and healing, the patient can be directed through the imagery with the help of an audiotape of the verbatim of PHS. The effectiveness of this method has to be studied further because the presence of another healer is a variable affecting the healing process.
7. The modern approach to health care is wholistic. That is, caring for the whole person (consisting of body, mind and spirit) which is done in ancient medical systems such as Ayurveda, Unani, Homeopathy, and Chinese medicines. Hence, it is highly recommended that the ministry of health care in every country recognize and support such wholistic approach. Pranic healing is one of such methods empowering one's innate healing system for health of mind, body, and spirit.

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