

The Experience of Breath as a Therapeutic Intervention – Psychosomatic Forms of Breath Therapy

A Descriptive Study about the Actual Situation of Breath Therapy in Germany, Its Relation to Medicine, and Its Application in Patients with Back Pain

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Key Words

Breath therapy · Psychosomatic medicine · Back pain · Proprioception · Mind-body relation

Summary

Context: Breath is a central element both in Eastern spiritual practice and in breath therapy, a treatment developed in Germany over the last 90 years. Among physicians, little is known about the working methods, goals, basic concepts, providers, and benefits for specific medical diagnoses of breath therapy. **Objective:** To investigate the actual circumstances of breath therapy in Germany, its relation to medicine, and its application in patients with specific diagnoses. **Design:** Descriptive study. **Setting:** Germany. **Study Subjects:** Members of the national association of breath therapists. **Instrument:** Questionnaire developed at Berlin Free University Medical Center in collaboration with the national association of breath therapists. **Outcome Measures:** Degree of approval/disapproval to given answers to semi-closed questions. **Results:** Breath therapy, as practiced in Germany, is a therapeutic method distinct from somatic therapy and psychotherapy. It is primarily applied by nonmedical therapists in a private practice setting. Through the experience of physical sensations from the nonmanipulated breath rhythm, this method provides a physically grounded, deep personal experience of an integrated sense of self. Breath therapy appears to be particularly helpful in patients with chronic back pain. **Conclusions:** Results suggest that breath therapy brings about its therapeutic effect through enhanced proprioception which, as other studies have shown, is deficient in patients with chronic back pain. This first descriptive study on breath therapy is limited by the use of self-reports from therapists which cannot control for provider bias. This therapeutic intervention deserves further investigation and controlled clinical research.

Schlüsselwörter

Atemtherapie · Psychosomatische Medizin · Rückenschmerz · Propriozeption · Geist-Körper-Beziehung

Zusammenfassung

Hintergrund: Der Atem ist zentrales Element sowohl in östlichen Meditationstechniken wie auch im Therapieverfahren der Atemtherapie, die sich in den letzten 90 Jahren in Deutschland entwickelt hat. Die Arbeitsweise der Atemtherapie, ihre Behandlungsziele, Grundkonzepte, Anbieter und ihre Erfolge bei spezifischen medizinischen Diagnosen sind in der Ärzteschaft wenig bekannt. **Fragestellung:** Die aktuelle Situation der Atemtherapie in Deutschland zu erfassen, ihre Beziehung zur Medizin und ihre Anwendung bei Patienten mit spezifischen Diagnosen. **Design:** Deskriptive Studie. **Setting:** Deutschland. **Studienteilnehmer:** Mitglieder des nationalen Berufsverbandes der Atemtherapeuten. **Instrument:** Fragebogen entwickelt am Universitätsklinikum der Freien Universität Berlin in Zusammenarbeit mit dem Berufsverband der Atemtherapeuten. **Ergebnisse:** Atemtherapie in Deutschland ist eine therapeutische Methode, die sich weder somatischen noch psychologischen Therapien einfach zuordnen lässt. Sie wird im Wesentlichen von nichtärztlichen Therapeuten in privater Praxis angeboten. Über die Erfahrung des nicht manipulierten Atemrhythmus wird eine von physischen Empfindungen getragene tiefe persönliche Erfahrung eines psychosomatisch integrierten Selbsterlebens ermöglicht. Atemtherapie scheint bei Patienten mit chronischen Rückenschmerzen besonders erfolgreich zu sein. **Schlussfolgerungen:** Die Ergebnisse lassen vermuten, dass die Atemtherapie ihre therapeutische Wirkung möglicherweise über eine Verbesserung der propriozeptiven Fähigkeiten der Patienten erreicht. Andere Studien haben gezeigt, dass gerade bei Patienten mit chronischen Rückenschmerzen diese Fähigkeiten vermindert sind. Die Daten dieser ersten deskriptiven Studie zu den möglichen Erfolgen der Atemtherapie sind begrenzt durch die ausschliessliche Verwendung von Therapeutenaussagen (provider bias). Zur Bewertung der Atemtherapie als einer therapeutischen Intervention sind genauere klinische Untersuchungen erforderlich.

Introduction

For many centuries, the focus on breath has been a major element of Yoga, Chi-Gong and meditation, the traditional Eastern tools for religious experience or healing. Breath therapy is a Western therapeutic method claimed equally by alternative/integrative medicine [4, 5] and by body-oriented psychotherapy [23–25]. It is also applied as an educational tool for personal growth. Breath therapy was developed in Germany parallel to Feldenkrais, Eutonie, Alexander Technique, Gindler Work, Sensory Awareness and Wilhelm Reich's Bioenergetics between World War I and II. In 1958 a group of German physicians within the national integrative medicine association (Zentralverband der Ärzte für Naturheilverfahren) founded a Commission for Practice and Research of Breath Therapy (AFA, Arbeits- und Forschungsgemeinschaft für Atempflege). Today, breath therapy is taught by different schools (described in more detail elsewhere [20]) and primarily applied by nonmedical therapists in private practices, in institutions of health education, and in psychosomatic hospitals. It is less known in German medicine outside of these institutions or in the USA. However, a group of pioneering German physicians and psychoanalysts – including the prominent German researcher in the field of psychosomatic medicine, T. von Uexküll – exposed themselves to breath therapy (a variation of breath therapy called 'Functional Relaxation') for 5 years and published a descriptive case study [32]. In 1991 the leading German institute for breath therapy (Middendorf-Institut) opened its first institute in the USA (San Francisco). Until now, the medical literature contains only anecdotal case reports, and clinical studies about breath therapy are only beginning [2]. This study is a first descriptive overview of the state of the art of this treatment [20].

What is Breath Therapy?

History

The roots of today's breath therapy – like those of body-oriented psychotherapy – go back to the culturally dynamic period in Berlin between the World Wars. Women, youth, and nature movements discovered the natural beauty of their physical bodies, the joy of the senses and of natural movement. Dance and gymnastics broke free from militaristic and mechanic drill to natural and free expression. Singing and voice education began to focus on breathing. Freudian and Jungian psychoanalysis established itself within official medical institutions. Oriental spiritual disciplines gained popularity. First experiments with new forms of psychotherapy utilizing body sensations were started. All of these innovative ideas merged and mingled with each other in the politically tense Berlin in an atmosphere of excitement and avant-gardism similar to the late 1960s or the Italian Renaissance. The first 'breath school'

was founded in Berlin in 1910 by singing and music teachers. Breath therapy gained recognition as an adjunct to psychotherapy in 1931 [14, 15], entered psychiatry textbooks in 1935 [15], and in 1936 breath therapists worked regularly in the German Institute for Psychological Research and Psychotherapy in Berlin. The more mechanical aspects of breath therapy found entrance into physical therapy and Berlin's university medical center. By then, breath therapy was mostly practiced by nonmedical women, and acceptance into mainstream medicine and psychotherapy remained limited. However, the subject of this study are the more psychosomatic aspects of breath therapy as applied by the members of the AFA until today.

Ruth Cohn, a German-American psychoanalyst experienced with an early version of breath therapy, commented in 1955: 'It seems to me, that the negligence toward bodily sensations may be an expression of the general taboo against the physical body so characteristic for our Western culture; this taboo might even be stronger than the taboo against sexuality.' [6; original in German, translated by Mehling]. As the 'cultural taboo towards sexuality' was partially overcome in the late 1960s, the therapeutic value of focused attention toward physical sensations began to be recognized only in the subculture of Yoga, Feldenkrais, and body-oriented psychotherapy in the 1980s. While patients' focus on physical sensation is generally overlooked in mainstream medicine [11], the English-American neurologist Oliver Sacks suggested an integration of the phenomenology of proprioceptive experience into the conceptual frame of neurological science [27]. 'Proprioception' [29], a term previously coined 'muscle sense', is the medical term for the perception of sensations from the inside of one's body, as opposed to perceptions from touch, taste, smell, hearing, and vision as the five senses of connection to the outside world. Sacks propagated a broader understanding of proprioception as a conceptual bridge over the chiasm of Cartesian body-soul dualism.

Phenomenology

Breath therapy works by directing the proprioception (or interoception [33]) toward the subtle physical sensations caused by breath movements. Breath therapy is practiced both in group and individual sessions in a setting similar to psychotherapy or physical therapy. Group sessions are offered via guided movement exercises in which the participants focus their awareness on the sensations of breath in relation to movements in space. These group sessions can be complemented by individual sessions, in which the patient's attention is guided by the therapist's touch and verbal interventions and directed inward toward the sensations of breath. Detailed descriptions of this particular approach are published elsewhere [19, 20, 22]. Different 'schools' of breath therapy vary in their approaches. Some use the focus on breath for the rediscovery of suppressed memories and emotions that are then processed into verbal cognitive psychotherapy [8]. Others use elements

of Yoga's ancient breathing exercises to willfully change the breath rhythm temporarily in a way that allows for archetypal psychological material to emerge [10]. Breath therapy as it is practiced here works primarily with a nonjudgmental accepting awareness of (a) the actual movements of breath without mechanical or willful corrections and (b) its experienced relation to the quality of motor functions, autonomous nervous system regulation, psychoemotional balance, and the sense of self. Breath therapy's relation to somatic medicine and to psychotherapy seems not to be clear to the public and has only rarely been addressed by medical authors [7, 20].

The Purpose of This Study

The purpose of this study was to gather data about the practice of breath therapy in Germany, its therapeutic concepts, indications, contraindications, effects, and side effects in relation to specific medical diagnoses. It also seeks to explore the basic philosophy, background, and training of the therapists who use this therapy. As anecdotal reports seem to indicate a particular benefit of this method in patients with back pain, additional orthopedic data were collected. The complete study was published as a medical dissertation within the Free University of Berlin [20].

Methods

Through collaboration between the Center for Natural Medicine and Family Medicine at the medical center of the Free University of Berlin (Director: Prof. Dr. med. M. Bühring) and the research committee of the German AFA, the professional breath therapist's association, a questionnaire was developed and sent to all members of AFA. Membership in this professional organization is no requirement for the practice of breath therapy, and an unknown number of breath therapists practice without organizational affiliations. Due to feasibility requirements, the study was limited to the members of the AFA. Demographic and sociological data about the therapists were collected. Data were collected for therapeutic concepts, technical goals, estimated effects for specific medical diagnoses, estimated outcome predictors in patients, side effects, indications, and cooperations with health care providers or institutions. When asked about treatment concepts, goals, criteria for effective therapy and their philosophy, breath therapists could give their answers in a graded way on an ordinal scale from 1 ('always') to 4 ('never'). Asked to rank their criteria of therapeutic success and to estimate the therapeutic effect on specific medical diagnoses, the therapists gave graded answers using ordinal scales from 1 ('very successful') to 4 ('not successful'). Asked for patients' characteristics as predictors of therapeutic outcome with breath therapy, breath therapists graded answers to 15 given personal qualities on an ordinal scale from 1 ('very important') to 4 ('unfavorable'). The strength of each statement was statistically assessed by mean value (μ), and the degree of concordance among therapists was assessed by standard deviation (σ). The collected data were exclusively extracted from the therapists' self-report. They were analyzed by descriptive statistics using SPSS (München, Germany); comparisons between subgroups were made by nonparametric tests.

Results

Between February and March 1997, 614 questionnaires were sent to all German members of the AFA. 357 returned the questionnaires. Of the original 614 members, 388 were actively working; 288 of these returned the questionnaire, i.e. 74.2% of actively practicing breath therapists answered the questionnaire; 8 of these were incomplete.

Demographic Data

243 of 280 breath therapists (86.5%) were women. Median age was 48 years, the youngest practicing breath therapist was 27 and the oldest 95 years of age. 238 of 280 breath therapists had completed at least one professional education before their breath training, 49.6% in the field of health and medicine. 48.7% graduated from university colleges. Breath therapy training was obtained from 6 major breath colleges. The school of Prof. Ilse Middendorf contributed 62.3% of all graduates, followed by the schools of Graubner/Graf Dürkheim, Prof. Glaser, Schlaffhorst/Andersen, Richter, Veening, and 12 minor institutions. A description of the different schools goes beyond the scope of this article and has been published elsewhere, including a list of the respective literature [20].

Work Environment

Although breath therapists work in about 45% of all psychotherapeutic hospitals in Germany [7], breath therapy – like Feldenkrais or Alexander Work – has not yet been officially recognized by the German health insurance system and is only rarely compensated. As a result, 94.9% of practitioners work independently in private practice, and 42.2% work additionally on an hourly paid basis in one or several institutions mostly for health prevention (including health insurances) or for adult education. Frequent cooperation with physicians occurs only for 25.6%. 82.8% of therapists work part time (20 h or less per week). The practice setting is similar to that of psychotherapists: 61.6% (median) of time is spent with single patients and the rest in groups. Individual clients are mostly (in 71.4%) seen once a week for 1 h over a course of 25 h (median).

Work Philosophy and Concepts (tables 1 and 2)

The foremost element in breath therapy is an enhancement training for the perception of bodily sensations, leading to an experiential precognitive understanding of the inner connectedness of psychological and somatic processes. A cognitive 'processing' of the individual experience in therapy can often be part of breath therapy; however, according to the great range of variance for this answer, a verbal cognitive processing is not uniformly seen as essential. Breath therapy is neither viewed as the training of a certain breathing technique to correct a supposed pathologic breath pattern nor as an attempt to increase a deficient breath volume. Nor is breath therapy a suggestive/hypnotic technique of relaxation.

Table 1. ‘Breath therapy is ...’ (statements ranked according to concordance)

Rank	Category	Value ^a	SD	Missing ^b
1	a method to promote health	1.28	0.58	6.8
2	a suggestive method	3.71	0.61	29.5
3	an educational method for personal development	1.39	0.62	6.8
4	an adjunct to psychotherapy	2.24	0.80	18.1
5	a relaxation technique	1.82	0.81	11.0
6	a third way between somatic and psychotherapy	1.66	0.88	14.2
7	an artistic creative method	2.47	0.94	17.4
8	a spiritual path / a form of meditation/prayer	2.48	0.96	20.6
9	a form of psychotherapy	2.55	0.98	22.4

^aValue = Mean between 1 (for ‘always’) and 4 (for ‘never’).

^bMissing = % no answers.

Table 2. Treatment goals within breath therapy session (ranked according to concordance)

Rank	Goal	Value ^a	SD	Missing ^b
1	training of perception of physical sensations	1.07	0.31	3.9
2	experiential understanding of inner relatedness of somatic and psychological processes ^c	1.23	0.48	5.0
3	developing an experiential body awareness	1.33	0.64	12.1
4	bringing to attention the autonomous breath	1.37	0.68	7.8
5	connecting to Essence/Being	1.59	0.79	13.5
6	creating an authentic relation	1.48	0.81	19.2
7	applying a breathing technique	3.29	0.90	22.1
8	experiencing oneself in a wider context	1.90	0.90	23.1
9	freeing the flow of life energy / pneuma	1.65	0.93	20.6
10	rhythmizing the unconscious breath	1.76	0.97	13.2
11	cognitive processing of the experience of breath	1.81	1.01	12.8

^aValue = Mean between 1 (for ‘always’) and 4 (for ‘never’).

^bMissing = % no answers.

^cThe German words used in the questionnaire are slightly different in their connotation: ‘seelisch’ translated here as ‘psychological’ includes ‘soul’ qualities, ‘leiblich’ translated here as ‘somatic’ includes qualities of our physical body as ‘full of life’.

Table 3. Estimated breath-therapeutic effect for specific medical diagnoses

Rank	Diagnosis (ICD-10)	Value ^a	SD	n/y ^b
1	pregnancy / preparation for birth (Z34)	1.49	0.61	686
2	back pain / low back pain / sciatica (M51/M53/M54/M99.9)	1.63	0.59	3,182
3	painful muscle tensions (M79.1)	1.67	0.60	3,195
4	neck pain / shoulder girdle pain (M50/M53/M54.2/M99.9)	1.67	0.59	3,082
5	nervousness / psychovegetative dysregulation / stress (F43/F48.0)	1.68	0.58	2,449
6	functional respiratory problems (including hyperventilation: F45.33)	1.68	0.59	1,477
7	psychogenic physical dysfunctions (F45.9/F54/F59/F68.0)	1.81	0.62	2,859
8	functional complaints in gynecological area (N94)	1.84	0.65	988
9	fatigue/ general malaise and weakness (R53)	1.87	0.63	1,642
10	avoidant personality disorder (F60.6)	1.88	0.61	1,760
11	migraine / tension headache (G43/ G44/ R51)	1.95	0.64	1,466
12	problems with psychosocial circumstances (Z63/Z72/Z73)	1.96	0.65	1,913
13	anxiety (F40/F41)	1.98	0.66	1,063
14	primary insomnia ((F51/G47)	1.99	0.71	923
15	COPD/ Asthma (J44/J45)	2.07	0.69	914
16	voice disturbance (R49)	2.07	0.65	884
17	atypical chest pain (F45.30)	2.08	0.65	614
18	functional stomach pain/gastritis (K29/K30/F45.31)	2.09	0.73	615
19	chronic bronchitis/sinusitis (J32/J41)	2.10	0.70	950
20	hypertension (I10)	2.15	0.68	922
21	hypotension (I95)	2.16	0.74	686
22	depression/dysthymia (F32/F33/F34.1)	2.28	0.71	860
23	obsessive-compulsive personality disorder (F60.5)	2.53	0.80	607
24	borderline personality disorder (F60.31)	2.61	0.81	506

^a Value = Mean for treatment success between 1 (‘excellent’) and 4 (‘none’).

^b n/y = Number of patients with this diagnosis seen by all breath therapists together within 1 year.

Table 4. Primary indications for breath therapy

Rank	Indication	Value ^a
1	functional respiratory problems	261
2	nervous tension/ vegetative dysregulation / stress	196
3	psychogenic somatic dysfunctions	187
4	COPD/asthma	135
5	back pain / low back pain / sciatica	128
6	painful muscle tension	72
7	problems with psychosocial circumstances	57
8	anxiety	42
9	avoidant personality disorder	42
10	pregnancy / preparation for birth	42

^a Value = Added point value for indication ranked as no. 1 ($n \times 3$), no. 2 ($n \times 2$), or no. 3 (n).

Table 5. Estimated improvement of spinal/paraspinal pain through breath therapy alone or in combination with psychotherapy

Improvement	Breath therapy, %	
	alone	combined with psychotherapy
Substantial	33.2	42.0
Distinct	41.4	37.8
Small	14.7	12.5
None	10.3	8.0
Rather worse	0.5	1.0

Generally breath therapy is seen as a method of health support and prevention and almost always as an educational means for personal development. In its relation to psychotherapy, breath therapy is occasionally seen as a form of psychotherapy, rather often as an adjunct to psychotherapy and very often as a third modality next to somatic and psychological therapies. Among 282 therapists, 140 (49%) apply at least one psychotherapeutic method in combination with breath therapy and the majority feels a need for the integration of psychotherapeutic education into their training.

92.2% of breath therapists work primarily in a 'salutogenic' fashion (table not shown): That is, emphasis is put primarily on supporting the healthy aspects of the individual patient ($\mu = 1.21$) and secondarily ($\mu = 2.18$) on the relief of symptoms and disease.

Medical Data

Breath therapists see the primary benefits of their work (table not shown) in enhanced physical self-perception ($\mu = 1.39$; $\sigma = 0.53$), improved sense of psychosomatic equilibrium ($\mu = 1.51$; $\sigma = 0.53$), and improved experiential perception of the interrelatedness of somatic and psychological processes ($\mu = 1.64$; $\sigma = 0.60$). They also see significant benefits in improved respiratory function ($\mu = 1.68$; $\sigma = 0.62$), improved access to inner health resources ($\mu = 1.72$; $\sigma = 0.63$) and muscle relaxation ($\mu = 1.77$; $\sigma = 0.55$).

Referring to 24 suggested specific medical diagnoses, breath therapists see their best therapeutic effects (table 3) in child-birth preparation, in musculoskeletal disorders, in psychovegetative and psychosomatic functional disorders, and in respiratory diseases.

Separately, the questionnaire asked for numbers of cases of the same 24 diagnoses seen in practice (table 3). The highest numbers were seen with musculoskeletal symptoms (ranks 1–3) followed by psychovegetative and psychosomatic functional disorders (ranks 4, 5, and 8) and psychiatric disorders (ranks 6, 7, and 11).

Asked to rank the diagnoses in their importance as primary indications for breath therapy (table 4), the breath therapists mentioned the same diagnoses as above as primary indications. Psychotic disorders were seen as primary contraindications ($n = 200$; 86.2% of answers). Undesired side effects were seen extremely rarely (1.52%), e.g. psychological dependency on the therapist, pathologic regression, or destabilization of a borderline personality disorder.

Most important predictors for a positive outcome (table not shown) were 'emotional openness' or the 'openness for new experiences' ($\mu = 1.5$; $\sigma = 0.53$) and 'self-responsibility' ($\mu = 1.5$; $\sigma = 0.61$). 'Capacity for introspection and self-reflection' and 'sensitivity' received similarly strong importance and concordance ($\mu = 1.5$ – 1.7 ; $\sigma = 0.55$ – 0.61). Most unfavorable was 'expectation of a fast elimination of symptoms' ($\mu = 3.7$; $\sigma = 0.64$). Among unfavorable characteristics the greatest concordance was measured for 'previous psychotherapeutic experience' ($\mu = 2.8$; $\sigma = 0.58$). 'Suggestibility' ($\mu = 3.2$; $\sigma = 0.81$) and 'weak ego structures' ($\mu = 3.2$; $\sigma = 0.86$) were seen as unfavorable predictors as well. Interestingly, 'intelligence' was seen as neither favorable nor unfavorable ($\mu = 2.5$; $\sigma = 0.63$).

Orthopedic Data

Asked for the incidence of spinal/paraspinal disorders (neck, back, sciatica) in their practice, breath therapists (table not shown) saw these problems in 50.6% (mean) of patients. 41.1% of patients with paraspinal complaints (i.e. 20.8% of all clients) sought help from breath therapists specifically for this indication.

Asked to estimate the improvement experienced by these orthopedic patients through breath therapy, therapists could rate improvement as 'substantial', 'distinct', 'small', 'none', or 'rather worse' (table 5). With breath therapy alone (without psychotherapy) 41.4% perceived distinct improvement. With a combination of breath therapy and psychotherapy 42.0% saw substantial improvement. This, of course, is a speculative estimate as reported by the therapists.

Discussion

The AFA represents the professional breath therapists' organization in Germany. In spring of 1997, 288 (74.5%) of its ac-

tively working members responded to a questionnaire collecting data about breath therapy, using graded statements about their basic therapeutic concepts and goals and about therapeutic effects estimated in patients with specific medical diagnoses. It is not known how many unaffiliated breath therapists are practicing outside the AFA who could not be included into the study. However, all different schools of the psychosomatic forms of breath therapy are represented by the members of the AFA.

From the data, the following picture of an average breath therapist emerges: The average breath therapist is a woman of considerable life experience working in a private practice; 1 out of 2 therapists holds an academic degree. She offers individual therapy sessions as well as group sessions in courses for adult education as a means of preventative health care. She works only part time and sees patients on a schedule similar to that of a part-time psychotherapist. Cooperation with physicians occurs only occasionally and even less frequently with psychologists.

What Are the Specific Goals of Breath Therapy?

Breath therapists see their work as a method of health education and personal development. They see breath therapy as a third separate modality distinct from somatic and psychological therapies. It is not understood as a trial of mechanical interventions imposed on patients from the exterior nor is it a 'fixing' of a pathologic or dysfunctional breath rhythm. Breath therapy is not like a drug administered by an expert who might imagine to know patients better than they know themselves. And breath therapy is not an interventional tool to reveal emotionally charged memories or unconscious psychological material about past traumatic experiences that then are cognitively assimilated and processed although it can very well be used that way, is often propagated as such, and has been successfully used by psychotherapists, e.g. bioenergetics (Reich, Lowen), holotropic breathing (Grof) [10], functional relaxation (Fuchs) [8].

Rather, these data suggest that the primary goal of breath therapy is the assisted development of an increased and differentiated perception and awareness of the body's physical sensations as they are related to the more autonomous or more controlled rhythm of the individual's breath. It is a belated maturation, virtually a catching-up of a hitherto neglected aspect among the various aspects (not developed in a simultaneous fashion) of an individual's personal qualities. As patients experience their physical sensations with increasing differentiation and accuracy, they shall gain a physically rooted and immediate understanding (unmediated by the thinking mind) of their inseparable personal physical and psychological qualities. This is experienced as an integrated sense of self. As breath therapy is seen more as an approach of personal growth from the inside outwards rather than an intervention from the outside inwards without the engagement of the cognitive mind's effort, breath therapy cannot be categorized as

either a somatic therapy or a psychological therapy. This was not a dilemma for the breath therapists in this study who see breath therapy as a distinct third modality.

How Does Breath Therapy Fit into Concepts and Paradigms of Our Western Medicine?

The study revealed that breath therapists cannot fit their approach into the Western medical model which bases its essential decisions regarding the choice of therapeutic interventions on a specific diagnosis. In this model, a medical diagnosis is defined as a symptom that can be pathophysiologically, biochemically, or even molecularly understood (or a group of related physical and possibly psychological symptoms). Breath therapy seems not to follow this approach which matches a specific intervention to a specific diagnosis. This makes it difficult for scientific institutions, health care providers, or health insurers to appreciate its value. Breath therapists rather base their interventional decisions on their assessment of the patients' health potential and those qualities from which the patients may learn to draw resources for their health. These qualities are not easily understood and are difficult to communicate within the Western scientific medical model.

However, a branch of clinical medicine established in Germany in the 1970s for disorders which include a psychological component, disputes this via a model which originally derived from studies on healthy holocaust survivors in Israel and which until now has undergone research in 20 countries [1, 16]. According to this model, a patient's disorder can be viewed from two complementary outlooks, and the therapeutic intervention can follow primarily either one of these two aspects: (a) The *pathogenetic* viewpoint tailors therapeutic interventions to a specific symptom or a diagnosis which is based on its biological or psychological pathogenesis, i.e. molecular or psychological trauma and risk factors. (b) A complementary *salutogenetic* perspective assesses, appreciates, and supports the patient's qualities and resources by which the patient is enabled to move on a continuum of human condition from 'dis-ease' to more health and ease. The latter view shifts the therapist's attention from risk factors to factors which promote health. While the breath therapists cannot fit their therapeutic approach into the established concepts of Western medicine, they find themselves in alignment with this latter model of contemporary German medicine.

What Is the Potential Value of Breath Therapy for Specific Medical Diagnoses?

The design of this study does not allow to exactly evaluate the effect of breath therapy on specific diseases. Instead, it provides the first observational data on the therapists' subjective estimates of the effect of breath therapy on patients who carry specific diagnoses. As breath therapists are not yet required to maintain a detailed documentation on patients' complaints and on their respective assessments and interventions, one of the major limitations of this study is due to a lack of docu-

mentation and the fact that data could only be collected from the therapists' recollections. Moreover, breath therapists are not trained in medical diagnostics. However, with this limitation in mind, a summation of individual statements into trend statements might be allowed. According to the summarized estimates of all breath therapists studied here, the most prevalent group of medical diagnoses for which the best therapeutic effect was seen, are musculoskeletal disorders. It is remarkable though that disorders of the respiratory system – including asthma, chronic bronchitis, speech and voice disorders, hyperventilation – are ranked only third behind musculoskeletal disorders following the group of more vaguely defined somatizing disorders with symptoms of autonomic nervous dysfunction.

What Are the Indications of Breath Therapy?

The ranking of the three most encountered disorders and best diagnosis-specific effects of breath therapy was reversed by the therapists when separately asked about the major indications of their therapies. It seems that the breath therapists were not aware of the high prevalence and individually estimated efficacy of breath therapy in this group of patients. This can possibly be explained by the high prevalence of musculoskeletal symptoms in the population and the above described non-symptom-specific approach to the patient.

What are Contraindications and Undesired Side Effects?

In patients with unstable ego structures (history of psychotic episodes or borderline personality), breath therapists see the risk of a potential destabilization through their therapy. For therapists who are not trained as clinical psychotherapists, this might be a valuable restraint. Interestingly however, when breath therapy was first presented as a therapeutic option, it was precisely for this indication, though within a clinical setting directed by psychotherapeutically trained physicians [14]. A more recent reminder of this indication comes from Swiss psychiatry [28]. If some breath therapists follow through their intention of a more profound and certified training in clinical psychotherapy, then adjunct breath therapy might well be considered again for disorders of unstable ego structures. If this limitation of breath therapy is observed, undesired side effects of breath therapy do not seem to play a considerable role.

Do Certain Psychological Characteristics of Patients Predict a Better Outcome?

This question was studied in a way similar to that in psychotherapy. Again, the injunctions from these results are limited as they are only a first estimate from recalled memories rather than from case documentations. The stated favorable patient's characteristics of 'emotional openness', 'self-responsibility', and 'ability for introspection' confirm that breath therapy is not seen as a simple relaxation technique or a therapy relying on patients' suggestibility. 'Expectation of a quick improvement of symptoms' seems to be an unfavorable patient's characteristic. The suspected beneficial char-

acteristics compare well with results from psychoanalytic research [18, 31] into predictive characteristics of their respective patients.

Why Might Breath Therapy Be Particularly Beneficial in Patients with Back Pain?

This is one of the study's major findings. At first sight, this result might not seem particularly intuitive to the reader unfamiliar with this therapeutic approach and, therefore, warrants a more detailed attempt in explaining this outcome. Numerous studies have been conducted to investigate personal characteristics in patients with chronic back pain and the dependency of the back pain's prognosis on psychological factors [for review see 20]. It has been shown in observational clinical studies [12] that psychological factors are considerably stronger predictors for the prognosis of back pain than the degree or duration of the organic lesions which are generally seen as causing the pain. According to neuropsychological case studies [17], these personality characteristics seem to converge to an image of a 'stick-it-out personality' (in the original: 'Durchhaltepersönlichkeit'). Hasenbring [13] showed in an observational clinical study that the depressive mood which is often found in these patients, is not a necessary predictor. The 'cheerful stick-it-out person' (in the original: 'fröhlicher Durchhalter') is at even greater risk of a poor prognosis. According to the neurologists Küttemeyer and Schultz-Venrath [17], it can be the denial of regressive needs as part of the 'stick-it-out personality' that regularly seems to lead to an 'atrophy of physical self-perception'. They suggested, therefore, a therapeutic program for chronic low back pain a necessary component of which is to 'develop physical self-perception which had suffered from the previous life style'. Training of physical self-perception, however, is – according to the German breath therapists – one of the mainstays of breath therapy.

Virtually all methods of body work (e.g. Feldenkrais, Alexander Technique, Yoga, Tai-Chi, Eutonie, sensory awareness, breath therapy), mental training for sports, and meditation seem to have one common denominator: They focus on physical sensations [11], switch from thinking and observing to sensing one's own physical sensations, or use the focus on physical sensations to initiate relaxation or a meditative state of mind. 'Physical self-perception' might be the psychological equivalent of what is known in neurology as 'proprioception'. That 'next to the activation of the nociceptive system an altered proprio- and interoception might play a role' in low back pain, was suggested in 1994 by the epidemiologists Raspe and Kohlmann [26] from their population-based observational studies. This has been confirmed by clinical studies [3, 9]. In other areas of orthopedic medicine (mostly knee and shoulder injuries) and in geriatrics (fall prevention) it has been demonstrated that a retraining of the patient's proprioceptive capabilities can enhance recovery. However, this has not been studied yet in back pain.

As phenomenologically described elsewhere [20] and stated by the breath therapists of this study, an essential element in breath therapy is the training of body self-perception, i.e. proprioception. The particular quality of breath therapy in low back pain patients is that the patients learn to focus on the subtle sensations of breath as it moves the inner physical space of those body areas where patients would rather not want to focus on. Patients generally want to get away from pain and invest considerable effort into avoiding the perception of painful areas. Moreover, low back pain seems to develop particularly in those neglected areas of the body, where patients have the greatest difficulty and the least practice in focusing on the perception of autonomous nonmanipulated breath movements. Through verbal guidance and skilled touch, breath therapists help in the development of the patients' skill to allow and fully experience such autonomous breath movements within the area of pain. Through which neurophysiological mechanism an enhanced proprioception might have a therapeutic effect in pain patients remains a challenging theoretical question. A detailed neurophysiological model has been proposed by the author [20].

Another poorly studied aspect of improved proprioception in patients with back pain is its relation to the patient's sense of self. As we know from studies on early child development [30], it is the perception of one's physical sensations that provide the deepest core of a child's sense of self. In adult psychiatry, the loss of a 'sense of self' is seen as a regular characteristic of depression. Breath therapy might offer a particular sense of self with the perception of an autonomous yet manipulable breath rhythm as a physically experienced core of this sense of self, a sense of self fostered also by Western contemplative or Eastern meditative practice [21].

Limitations of This Study

All presented data are collected by a questionnaire answered by the therapists. Self-reports by therapists may be biased and

overestimate the benefits of this method. These data are the first descriptive evaluation of this method and provide only estimates of its potential medical value as a first step into further research.

Conclusion

The results of this descriptive study suggest that breath therapy may enhance proprioception and, therefore, may be an appropriate complementary intervention particularly for patients with back pain. Such intervention deserves to be subjected to a rigorous clinical trial. In fact, such a study is in preparation at the University of California, San Francisco. In medical science, chronic low back pain is an area for which the Cartesian split into psychological and somatic medicine might be a major obstacle in overcoming today's therapeutic impasse. If clinical research can demonstrate a therapeutic effect of breath therapy on patients with back pain, we might discover breath therapy to be a therapeutic method which works directly at the interface of physical and psychological processes. The experience of breath as a therapeutic intervention might be an essential step toward an integrative medicine.

Information on Breath Therapy in the USA

The Middendorf Breath Institute, 830 Bancroft Way #104, Berkeley, CA 94710.

www.breathexperience.com

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des Berufsverbandes Deutscher Internisten e.V.

30. Januar – 3. Februar 2002

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Ort: Schönau am Königssee, Klinikum Berchtesgadener Land

Programm:

Mittwoch, 30.01.02

13.00 – 13.30 Uhr Eröffnung
 13.30 – 15.00 Uhr Phytotherapie 2/7 (bei Erkältung, Infekt, Bronchitis)
 15.15 – 16.45 Uhr Phytotherapie 4/7
 17.00 – 18.45 Uhr Ernährung 2/7 / Ballaststoffe
 18.45 – 19.30 Uhr Phytotherapie 7/7

Donnerstag, 31.01.02

08.30 – 10.00 Uhr Phytotherapie 6/7
 10.15 – 11.45 Uhr Ernährung 4/7 / bei Nierenerkrankungen, Hochdruck
 12.00 – 12.45 Uhr Ernährung 5/7 / Fallbeschreibungen
 14.30 – 16.00 Uhr Ordnungstherapie 2/8 / Entspannungsverfahren, Atemverfahren
 16.00 – 17.30 Uhr Andere Therapieprinzipien 1 / 4 / Reiztherapie
 17.45 – 19.15 Uhr Ernährung 7/7 / Ernährung bei Krebs und gastroenterolog. Krankheiten

Freitag, 01.02.02

08.30 – 10.00 Uhr Ordnungstherapie 4/8
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 14.00 – 15.30 Uhr Qualitätssicherung beim Naturheilverfahren

15.45 – 17.15 Uhr Ausleitende Verfahren, Therapiepläne/Colloquien 4/4
 17.30 – 18.45 Uhr Ausleitende Verfahren, Therapiepläne/Colloquien 4/4
 Ganzheitliche Kardiologie / Ayurveda

Samstag, 02.02.02

08.30 – 10.00 Uhr Ausleitende Verfahren 2/6 / Aderlass, Schröpfen
 10.15 – 11.45 Uhr Ausleitende Verfahren 4/6 / Blutegeltherapie
 14.30 – 16.00 Uhr Ausleitende Verfahren 6/6 / Diaphoretische u. laxierende Verfahren
 16.15 – 17.00 Uhr Andere Therapieprinzipien 1/1 / Geschichte der Naturheilverfahren 2/4
 18.00 – 19.30 Uhr Andere Therapieprinzipien 4/4 / Colloquien, Rheumatologie / Ernährung / Medikation m. Phytotherapeutika

Sonntag, 03.02.2002

08.30 – 10.00 Uhr Ordnungstherapie 6/8 / Gesundheitsbildung, Gesundheitsberatung
 10.15 – 10.45 Uhr Test (obligatorisch)
 11.00 – 12.30 Uhr Ordnungstherapie 8/8 / Das ärztliche Gespräch, Krankenführung

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