

Positive effects, side effects and adverse events of intensive, clinical holistic therapy: A review of the program "Meet Yourself" characterized by intensive body-psychotherapy combined with mindfulness meditation at Mullingstorp in Sweden

Søren Ventegodt, MD, MMedSci, EU-MSc-CAM^{*1,2,3,4,5}, Isack Kandel, MA, PhD^{6,7} and Joav Merrick, MD, MMedSci, DMSc^{5,7,8,9}

¹Quality of Life Research Center, Copenhagen, Denmark

²Research Clinic for Holistic Medicine

³Nordic School of Holistic Medicine, Copenhagen, Denmark; ⁴Scandinavian Foundation for Holistic Medicine, Sandvika, Norway

⁵Interuniversity College, Graz, Austria

⁶Faculty of Social Sciences, Department of Behavioural Sciences, Ariel University Center of Samaria, Ariel, Israel

⁷National Institute of Child Health and Human Development

⁸Office of the Medical Director, Division for Mental Retardation, Ministry of Social Affairs, Jerusalem, Israel

⁹Kentucky Children's Hospital, University of Kentucky, Lexington, United States

Abstract

To review and evaluate the side effects and negative effects of an intensive clinical holistic medicine (CHM) program in Sweden. Intensive clinical holistic therapy has since 1985 been used on the training facility "Mullingstorp" in Sweden for curing psychological, psychiatric and existential illnesses and improve quality of life. The treatment combines intensive, psychodynamic psychotherapy with intensive, emotionally releasing bodywork, and mindfulness meditation. The patients are often well-educated people with serious mental and existential issues. Recently it has been documented that patients with low QOL (quality of life) are able to improve or normalize (NNT=2) their SOC (sense of coherence) and other dimensions of health. At this centre about 4,000 patients were treated in the 1985-2009 period. From our review and personal communication with the centre there were no significant side effects found. Re-traumatisation: NNH>4,000, Brief reactive psychosis (patients with no previous history of psychosis/mental illness): NNH>4,000. Depression: NNH>4,000. Depersonalisation and derealisation: NNH>4,000. Implanted memories: NNH>4,000. Side effects from high-energy manipulations of the body: NNH=1,000 (small bone fractures that heal spontaneously, primarily broken ribs); NNH>4,000 (permanent physical problems). Suicide and suicide attempts: NNH>4,000. Suicide was found to be prevented. Hospitalisation for physical health problem: NNH>4,000. Hospitalisation for physical/mental health problem (patients with no prior psychotic events) during or 14 days after treatment: NNH>4,000. Interpretation: We conclude that intensive, clinical, holistic therapy is an efficient treatment for psychological, psychiatric and existential problems and illnesses, which is completely safe for the patient. The therapeutic value $TV=NNH/NNT>2,000$ or $TV=NNH/NNT=500$, if you include small bone fractures.

* **Correspondence:** Søren Ventegodt, MD, MMedSci, EU-MSc-CAM, Director, Quality of Life Research Center, Classensgade 11C, 1 sal, DK-2100 Copenhagen O, Denmark. Tel: +45-33-141113; Fax: +45-33-141123; E-mail: ventegodt@livskvalitet.org

Keywords: Integrative medicine, clinical holistic medicine, holistic health, mindfulness meditation, mind-body-medicine, body psychotherapy, quality of life, mental health, suicide, suicide prevention, therapeutic value.

Introduction

The aim of this review was to look at positive effects and adverse effects/side effects including negative event of intensive clinical holistic therapy, a subtype of integrative medicine only involving conversation and touch therapy in a holistic philosophical context. We found a training facility for existentially oriented body-mind therapy in Sweden, where the intervention called mind-body-medicine includes a combination of intensive psychodynamic psychotherapy with bodywork especially designed to release the most intensive emotions connected to relations, childhood, love, sexuality, life and death.

The centre "Mullingstorp Education and Health Centre" is an institute for advanced self-knowledge (<http://www.mullingstorp.com/english/>) established in 1985 by the physician Bengt Stern at his father's farm in Vikbolandet outside Norrköping and not far from Stockholm. Treatment consists of one-week of intervention, where people live at the training site and receive 50 hours of intensive holistic therapy. It has been established as a course in self-exploration, personal development and quality of life called "Meet yourself" in two stages. Each course can have up to 22 participants who will come for a week to live on site. The treatment combines body-psychotherapy with mindfulness meditation. It thus works with body, mind and spirit of the patient and it can therefore be perceived as "holistic medicine". Its basic idea is to support the patient in self-exploration and therefore called "clinical medicine". The patient is taken through a number of exercises that stimulates self-exploration and focus on the most important emotions related to physical and mental health and sexuality.

During its 34 years of existence, the centre has treated more than 4,000 patients. The founder of the centre, Bengt Stern, who developed the methods, passed away in 2002, but the centre and its leadership is continued by his wife, Viktoria Eriksson, who worked closely with him at the centre since 1990.

Experiences from mind-body self development

Several studies have been conducted on the mind-body self development course established by Bengt Stern (1). This course can be seen as clinical holistic medicine (CHM) in the non-drug treatment with body-mind therapy in the tradition of Hippocrates (2). Study I on 107 consecutively chosen patients that entered the therapy, described the health status and quality of life of the participants, when they entered the treatment (3) and study II documenting the therapeutic effect of the therapy by measuring 83 patients before and after therapy (4).

The patients are often well-educated people, who come to Mullingstorp in a poor existential condition (1,3,4). At least 25% of them were thinking about suicide and about 1% revealed that they already were determined to commit suicide, when they arrived to the course. Their average QOL (quality of life) before treatment was similar to mentally ill patients (3) and a large fraction of the patients, presumably one in three, had been under psychiatric treatment before they arrived to the course, without experiencing cure for their illnesses. Many of these patients were severely depressed and still on antidepressant drugs, when they started therapy at Mullingstorp Centre (1,3,4).

In study I (3), six of the 13 subscales for HRQOL (health related QOL) showed pronounced and significantly low starting values ($p < 0.001$) in the initial study group ($n=107$), namely: emotional health, cognitive, family and partner functioning. This is unusual in a group with such high education level. Long-term sick leave (>6 months) was three times more common than in the general population.

The outcome measures in Study II (4) were changes in HRQOL and SOC-13 (sense of coherence) in the followed-up study group ($n=83$) and in the control group ($n=69$). Eight subscales of HRQOL showed clinically significant improvements in the study group ($>9\%$, $p < 0.01$), namely: general health (9%), emotional well-being (negative 45% and positive 26%), cognitive functioning (24%), sleep (15%), pain (10%), role limitations due to emotional health (22%) and family functioning (16%). Self-rated SOC was improved in the study group after the course (5,1%, $p < 0.01$), documenting that existential healing took place (5-9). Use of psychoactive drugs decreased

in the young participants after the course (1,3,4). The most significant increase was in well-being, a dimension of QOL, where most patients seem to benefit (NNT=2 or less).

A new dissertation (10) under the auspices of the Karolinska Institutet in Sweden based upon these findings concluded that the therapeutic intervention actually normalized the mental health and quality of life of the participants: "This study group consisting of well-educated women and men rated their initial emotional health unexpectedly low. After the course there was a significant improvement in HRQOL and SOC, up towards normal population values. The studies (1,3,4) also found that:

- It is possible to perform a scientific evaluation even of soft, self-assessment data describing subjective experiences after a course intervention based on a theoretical background of integrative medicine.
- The selected questionnaire methods gave a reasonable spectrum of clear, clinically significant changes mixed with stable values. The method seemed particularly effective for discovering the state of emotional well-being.
- Allowing spontaneous comments in data collection can be well worth the effort in a previously unexplored area, enabling the capture of completely new phenomena.
- The course duration of seven days means that people with fraught memories have time to get past the initial shock phase of the crisis process and facilitate the emotions dealing with it in a constructive way.
- The course intervention was able to improve the participants' HRQOL and SOC.
- The course improved cognitive and emotional function, which in turn increased motivation. It thus has the potential to be used as a starting point in rehabilitation for working life, for people who are forced for health reasons to cope with a readjustment crisis and establish a foundation for a new orientation.

Conservatively estimated from the presented data in the two papers and the thesis we find the Number Needed to Treat (NNT) to cure the patients from their

subjective existential problems, bad mental health, and low quality of life to be around 2 (NNT=2). A more accurate analysis with dichotomised data more useful for evaluating NNT might well show a NNT=1.

The actual intervention is described in details in the book "Feeling bad is a good start" (1). The tools used are, according to the systematic described for advanced CHM-tools (11), at the CHM-level 8 tools called "direct, existential healing of love, power, and sexuality" (to tool "controlled violence" in the "birth exercise" and the tools of therapeutic repression and "controlled sexual abuse" in the "fascist exercise"); level 9 tools called "mind-expanding and consciousness-transformative techniques", (in the "death exercise"); and level 10 called "techniques that transgress the personal borders" (used in the "birth exercise" as there is no return once you have accepted to participate in this exercise - you cannot withdraw your consent, but you must go through the process of psychological re-birth, which is logical as you provoke the hardest of psychological resistances in this exercise. In the "birth exercise" Bengt Stern and later the therapists of Mullingstorp even used induction of strong pain by pinching the patient's inner thighs or testicles, or suffocation by holding a hand over mouth and nose, as an effective tool for motivating the patients to fight for their lives and reconnect to the fundamental will to live. In his book Bengt Stern wrote about the birth exercise, in spite of the use of level 10 tools, that he never observed side effects or adverse events from it (1)). Bengt Stern and his therapists thus took all the most powerful tools known to holistic medicine into use, when they developed the "Meet Yourself" course.

As it is not likely that the side effects of some exercises annihilate the side effects from other, the course is thus able to reveal both the adverse effects of all the individual therapeutic tools, and from any combination of tools combined. The exercises include the use of methods, which in the CHM-system is called level 8. The rationale for using these methods is the famous healing principle of similarity, well described in the scientific experience described in the EU-masters degree in complementary, integrative and psychosocial health sciences at Interuniversity College, Graz (12-26).

When something in today's medicine is highly efficient, it normally comes with a price. The next most important research issue, after documenting the positive effect of the therapy, is therefore to investigate the adverse effects/side effect and negative events of this kind of intervention.

Since more than 4,000 patients have now been treated at Mullingstorp during the last 35 years, it allows us to make a very detailed list of the side effects of and negative events like suicide related to this treatment, and also to document the probability of these side effects and negative events for the patient. A similar investigation in clinical holistic medicine in Denmark did not find any significant side effects or negative event, but this was done on only 500 patients (27). Smaller studies on treatment of physical, mental, sexual, existential, psychological, and working ability problems all documented no adverse effects and no negative events (28-36) and it is also known that similar interventions with holistic sexology had no side effects or negative effects (37).

But this is the first time, where the treatment of a very large group of patients can be evaluated. And the methods and exercises used here are the most intensive that has ever been used in holistic medicine, so if this therapy (meet yourself course) is safe, then clinical holistic medicine is recommended as a safe intervention.

The therapy

The psychodynamic psychotherapy is of the Jungian type, with focus on archetypes, energy, charkas, and the human collective (un)unconscious. The bodywork is of the psychodramatic type, where central gestalts of life – birth, all kinds of human interactions and finally death – are confronted, and old repressed emotions released. The reflections and learning are facilitated by silence, mindfulness meditation, sharing and psychodynamic group processes. The holistic, existential therapy is organized in the frame of a seven-day intensive experiential learning course.

The “birth exercise” is taking the participant through all the phases of the psychological birth as described by Stanislav Grof (38-56). Stanislav Grof (born July 1, 1931 in Prague, Czechoslovakia) is one of the founders of the field of transpersonal

psychology and a pioneering researcher into the use of altered states of consciousness for purposes of analysing, healing, growth, and insight of the humanly psyche. The “fascist exercise” take the participant through the experience of all traumatic aspects of human interaction, facing good and evil, sexual and non-sexual repression, violence and abuse, and even for the patients that need to integrate such a traumatic experience, into psychological annihilation (38-56). The “death exercise” takes the participant into his or her psychological death, the experience of personal ruin and ultimate disaster, allowing the person to enter the process of re-metamorphosis back to the real, genuine self (38-70).

Review of the meet yourself course

Retrospective analysis of 4,000 patient's side effects and adverse events in relations to the treatment with intensive, clinical holistic medicine (body-mind therapy and mindfulness meditation). The side effects/adverse effects that we looked for are all side effects that were found in any study or case report on psychotherapy or bodywork (see table 1), combined with the negative events of suicide, suicide attempts, and hospitalisation. Developmental crisis is a natural and integral part of this therapy and happens in one in two of the patients, but this item is not included in the review. We have not included “hypomania” in table 2; hypomania – a state of very good mood, full of hope and optimism, that sometimes can be annoying to a person's family, friends, and colleagues at work, but this is not a psychotic state as the state of mania - is sometimes considered to be a side effect.

We believe it to be a natural reaction to lifetime long self-repression, and therefore an important aspect of the healing process for patients who are existentially repressed at the beginning of the course. Hypomania also provides the patient with the energy necessary for a complete makeover of personal life, improving all relationships, changing work and carrier plans to fit the new direction in life and so forth. Therefore we have excluded hypomania from the review of side effects. The number of patients developing hypomania lasting longer than 48 hours was estimated to 1%.

If an episode with psychotic elements lasted less than 48 hours it was registered as “a psychotic healing crises”, which was present in more than one percent of the patients, but seen as a normal part of treating

severe mental problems that included childhood psychosis (psychosis in the patient’s childhood).

Table 1. Side effects/adverse effects caused by psychotherapy, bodywork, and psychotherapy combined with bodywork (27)

Psychotherapy
(1) Re-traumatisation
(2) Brief reactive psychosis
(3) Depression (and hypomania)
(4) Depersonalisation and derealisation
(5) Implanted memories and implanted philosophy
(6) Iatrogenic disturbances
(7) Negative effects of hospitalisation
(8) Studies with no side effects, or side effects less than the side effects of drugs
(9) Paradoxal findings: Psychotherapy diminished side effects
Bodywork
(1) Brief reactive psychosis
(2) High-energy manipulations of the body in chiropractics can cause damage to the spine of vulnerable patients.
(3) Damage to the body if the therapist is unaware of illnesses or for example fractures.
Psychotherapy and bodywork (i.e. in manual sexology (the sexological examination), clinical holistic medicine (CHM) and holotropic breath work)
(1) Brief reactive psychosis
(2) Implanted memories and implanted philosophy
(3) (Developmental crises)

Collection of data for this review

Data was collected at two occasions. First in connection with the first author’s participation in the “meet yourself” course in August, 2004, where the prevalence of side effects was studied on the participants and side effects and negative events were discussed with the therapists and second by a complementary interview given by Viktoria Eriksson to the first author in March 2009, where all numbers of patients with all significant side effects (like bone fractures) and life events (like suicide-attempts, suicides, hospitalisation, brief reactive psychoses etc) were reviewed. This allowed for this review to include all patients treated from January 1985 to February 2009. The data (table 2 and 3 and the description of the results) was sent to Victoria

Eriksson for final correction and she returned her corrections.

As significant side effects and negative events are easy to identify and remember and as they obviously always made a lasting impression on Bengt and Viktoria, since they used every event to learn from in order to improve the course. The data collected on the training site some years ago on the insignificant and much more prevalent side effects like skin-abrasions, blue marks, and tenderness has a larger uncertainty, as they are estimated from the number of such events during the course that the first author participated in. The total number of participants is calculated from the average number of participants each year. During the course, data of side effects and negative events was documented in two ways. Before the course a comprehensive 10-page questionnaire on QOL and past life events was filled out by the participants

revealing earlier psychotic episodes, history of psychiatric treatment, use of antidepressant and antipsychotic drugs etc. During the course all therapeutic processes was observed by a physician that recorded all observed side effects and negative events and in the end of the course all participants

were interviewed about positive and negative experiences. After the course all participants were asked to report problems and negative events to the training centre.

Table 2. Side effects/adverse effects caused by Bengt Stern's one week intervention with intensive, clinical, holistic medicine on 4,000 patients

	Side effects/ Adverse events	Number of patients	NNH
1.	Re-traumatization	0	>4,000
2.	a) Brief reactive psychosis, with no history of previous psychotic, mental illness	0 of 2,000	>2,000
	b) Brief reactive psychosis, with a history of previous mental illness	2 of 2,000	1,000
3.	Depression	0	>4,000
4.	Depersonalisation and derealization	0	>4,000
5.	Implanted memories and implanted philosophy	0	>4,000
6.	Iatrogenic disturbances	0	>4,000
7.	Negative effects of stay at Mullingstorp	0	>4,000
8.	a) Side effects from high-energy manipulations of the body: Insignificant physical problems lasting less than one week (skin-abrasions, blue marks, and tenderness)	400	10
	b) Side effects from high-energy manipulations of the body: Problems lasting less than three months (fractures etc.)	4	1,000
	c) Side effects from high-energy manipulations of the body: Permanent physical problems.	0	>4,000
9.	Damage to the body if the therapist is unaware of illnesses, fractures etc.	0	>4,000

Table 3. Negative events during or after Bengt Stern's one-week intervention with intensive, clinical, holistic medicine on 4,000 patients (* this patient had a history of previous mental illness)

Negative events			
1.	Suicide attempt in relation to treatment – on the training site/during treatment	0	>4,000
2.	Suicide attempt in relation to treatment – up to 3 month after treatment	0	>4,000
3.	Committed suicide in relation to treatment – on the training site/during treatment	0	>4,000
4.	Committed suicide in relation to treatment	0	>4,000

– up to 3 month after treatment		
5.	Hospitalisation for physical health problem, during or up to 14 days after treatment	0 >4,000
6.	Hospitalisation for mental health problem, during or up to 14 days after treatment	1* 4,000

Concerning long term follow up the procedure does still not exclude the possibility of side-effects only showing some time after the course, but because of limited resources there has been no long-term follow up. It is worth noticing that long-term follow up for side effects is not a normal procedure in biomedicine, so we believe that in this review the side effects and negative events are documented with the same standard as it is done in normal medical research.

Skin-abrasions were relatively common as the “birth exercise” happened on an uncovered cement floor. The history of HIV was therefore carefully collected from all participants before the therapy, to avoid participants or therapists being infected. There is no known case of HIV-infection from the participation in the course.

Table 2 shows that none had significant side effects from the CHM-therapy except for four, who had fractures. Three participants suffered from a broken rib, and one from a broken hand-bone (the boat bone). None suffered from re-traumatisation, understood as getting a new trauma on top of an old one, and therefore feeling worse after treatment than before. None of the participants without a medical record of previous psychiatric treatment and psychosis suffered from “brief reactive psychosis”, but a few patients that had psychotic events before got these again.

Depression – meaning that a patient was more depressed after the treatment than before – did not happen, but a significant number of patients experienced hypomania, in this study defined as “a state of excitement and renewed interest in life and sexuality, that people around them found to be embarrassing”. None suffered from the experience of losing themselves; on the other hand the experience of re-finding one self was very common (NNT=2) (1,3,4). As mentioned above three patients suffered from a broken rib, and one from a broken finger, but no patient suffered permanent damage.

Table 3 shows the negative events from the CHM-therapy. None has ever, to the knowledge of

Viktoria Eriksson and the other therapists, attempted to commit suicide on the training facility or immediately after that in relation to the treatment. Quite contrary, a significant number of the patients, estimated to around 50, came into treatment determined to end their own life by own hand, and all of these patients let go of their negative decision during the treatment. None committed suicide after the course. During the period 1980-2009 two patients did commit suicide, but very long time after the treatment: In 1988 a 55-year old, Norwegian woman committed suicide two years after a course and more recently a 60-year old man committed suicide about one year after the course. Viktoria Eriksson does not believe that these suicides were provoked by the course, and the time-delay does not imply that this could be a consequence of a reactive psychosis from the course or a depression developed due to the therapy. The national health authorities did not investigate the incidents, which imply that there was suspicion of responsibility. In 2006 a 30 year-old woman was hospitalised in a mental hospital during the treatment, since she had a previous history of psychiatric illness.

The physical damage (small bone fractures) was not so serious that hospitalisation was necessary. All in all we found no significant side effects or negative events from the treatment of 4,000 patients with intensive, clinical holistic therapy at Mullingstorp Centre.

Discussion

One could argue that there should not be skin-abrasions, blue marks, tenderness or broken fingers from medical treatments. One could also question whether it is ethical or not to use coercion as a therapeutic tool (see level 10 in tools (11)). It is important to understand that the patients quite often are severely mentally ill before they arrive and even

sometimes have decided to commit suicide, but that only the necessary intensity of therapy is applied. The therapy seems to be life saving for some of the most ill patients. Taking this into consideration, and the fact that no side effect was permanent, and the fact that less than one in a thousand had a fracture, the degree of intensity from the tools used seems to us very reasonable. In comparison, one in 1,000 dies during full anaesthetics, and one patient out of 10 gets an infection in a normal hospital, and one patient in two or less gets adverse effects from antipsychotic medication.

The bone fractures are a direct result of the physical intensity in the birth exercise. Why this intensity of physical pressure is necessary is well explained in the book (1). One could argue that therapy should not happen on a rough cement floor, but this element is actually a therapeutic part of the therapy. The cement floor minimize the pressure you need to put on each person in order to obtain spontaneous regression into the most painful experience of your life and the problematic aspects of your own physical birth bringing that person into a healing process and experiencing psychological re-birth. The intensity of this therapy is what makes it possible to help such a large fraction of even the most severely mentally ill patients (NNT=2), even with acute and severe psychiatric and existential problems in such a short span of time.

The risk for physical damage is still very small compared to a ski-tour, and no patients were seriously harmed, making the whole treatment much safer than five days on ski. Two patients with a psychiatric history and previous psychosis events had brief reactive psychosis, and one of these needed brief mental health hospitalisation after the course. We believe this to be a prolonged healing crisis, and no significant harm has done to these patients, who habitually get into psychotic states.

The most controversial idea in this work seems to be the necessity of the developmental crises (47,48). Bengt Stern's idea was that you need to confront the negative emotions, gestalts and trauma to heal, and this is in accordance with the old Hippocratic tradition. Accelerated personal development leads to intensive existential crisis, and only if the patient is well guarded and well supported, can this kind of

intensive healing be possible. Mullingstorp Centre seems to provide exactly this to its participants.

As it is not likely that the side effects and adverse events of some of the therapeutic exercises annihilate the side effects from others, the "Meet Yourself" course is thus able to reveal both the adverse effects of all the individual therapeutic tools, and the side effects and negative events from any combination of CHM tools. Combined with the finding that there is no significant adverse effects and negative events from Bengt Stern's therapy on any of more than 4,000 patients, allows us to conclude that it is a complete safe treatment. The fact that it seems to prevent suicide, in accordance with earlier similar findings (71), makes it even safer, and makes it recommendable even for the severely mentally ill patients, which is known often to commit suicide after initiation of psychiatric treatment and during hospitalisation (72).

The healing potential of CHM has yet to be established; single patients with of cancer and schizophrenia have already been helped with this method (73-77) and the next logical step seems to study the effect of CHM more systematically with the most ill patients. In principle even HIV could be cured in this way (78).

Conclusions

We found that at least one in two (NNT=2) were helped, with no significant side effect or negative events from intensive clinical holistic medicine (mind-body-medicine) conducted at the Mullingstorp Centre in Sweden, except for small bone-fractures that healed without hospitalisation (NNH=1,000). We found NNH>2,000 for mental hospitalisation and NNH>2,000 for brief reactive psychosis (patients with no prior history of mental illness). No patient committed suicide or attempted to commit suicide during the treatment. We actually found that suicide was prevented by the CHM-treatment, as about 1% of the patients had decided to commit suicide before the course, but let go of this decision during treatment, which is a very important finding. The existential healing crisis is not a side effect, but a part of the therapy.

Former studies have shown that mental health and quality of life is normalized for most patients (NNT=2) (1,3,4). Combined with the complete lack of side effects and adverse events, we conclude that intensive, clinical holistic medicine is safe and an efficient help for patients with physical, mental, psychological and existential problems, who want an improved quality of life.

Judged from the existing data we recommend that CHM is used for mentally ill patients, also the severely ill, and we also recommend that the efficacy of CHM be tested for physical illnesses. We recommend national funding of research that documents the effect of CHM for existential problems, sexual dysfunctions, and the more serious diseases like diabetes Type 1, schizophrenia, cancer and even HIV.

Acknowledgments

We wish to thank Viktoria Eriksson for providing most of the data on side effects and negative events. The Danish Quality of Life Survey, Quality of Life Research Center and the Research Clinic for Holistic Medicine, Copenhagen, was from 1987 till today supported by grants from the 1991 Pharmacy Foundation, the Goodwill-fonden, the JL-Foundation, E Danielsen and Wife's Foundation, Emmerick Meyer's Trust, the Frimodt-Heineken Foundation, the Hede Nielsen Family Foundation, Petrus Andersens Fond, Wholesaler CP Frederiksens Study Trust, Else and Mogens Wedell-Wedellsborg's Foundation and IMK Almene Fond. The research in quality of life and scientific complementary and holistic medicine was approved by the Copenhagen Scientific Ethical Committee under the numbers (KF)V. 100.1762-90, (KF)V. 100.2123/91, (KF)V. 01-502/93, (KF)V. 01-026/97, (KF)V. 01-162/97, (KF)V. 01-198/97, and further correspondence. We declare no conflicts of interest.

References

- [1] Stern, B. Feeling bad is a good start. San Diego: ProMotion Publ, 1996.
- [2] Jones WHS. Hippocrates. Vol. I-IV. London: William Heinemann, 1923-1931.
- [3] Fernros L, Furhoff AK, Wändell PE. Quality of life of participants in a mind-body-based self-development course: a descriptive study. *Qual Life Res* 2005;14(2):521-8.
- [4] Fernros L, Furhoff AK, Wändell PE. Improving quality of life using compound mind-body therapies: evaluation of a course intervention with body movement and breath therapy, guided imagery, chakra experiencing and mindfulness meditation. *Qual Life Res* 2008;17(3): 367-76.
- [5] Antonovsky A. Health, stress and coping. London: Jossey-Bass, 1985.
- [6] Antonovsky A. Unravelling the mystery of health. How people manage stress and stay well. San Francisco: Jossey-Bass, 1987.
- [7] Ventegodt S, Andersen NJ, Merrick J. Holistic Medicine III: The holistic process theory of healing. *ScientificWorldJournal* 2003;3:1138-46.
- [8] Ventegodt S, Andersen NJ, Merrick J. Holistic Medicine IV: Principles of the holistic process of healing in a group setting. *ScientificWorldJournal* 2003;3:1294-1301
- [9] Ventegodt S, Flensburg-Madsen T, Andersen NJ, Merrick J. Life mission theory VII: Theory of existential (Antonovsky) coherence: a theory of quality of life, health and ability for use in holistic medicine. *ScientificWorldJournal* 2005;5:377-89.
- [10] Fernros, L. Improving quality of life with body-mind therapies. The evaluation of a course intervention for personal self-awareness and development. Dissertation.. Stockholm: Karolinska Institutet, 2009. Accessed 2009 Mar 01. <http://diss.kib.ki.se/2009/978-91-7409-356-8/>
- [11] Ventegodt S, Clausen B, Nielsen ML, Merrick J. Advanced tools for holistic medicine. *ScientificWorldJournal* 2006;6:2048-65.
- [12] Antonella R. Introduction of regulatory methods. Graz, Austria: Interuniversity College, 2004.
- [13] Blättner B. Fundamentals of salutogenesis. Graz, Austria: Interuniversity College, 2004.
- [14] Endler PC. Master program for complementary, psychosocial and integrated health sciences Graz, Austria: Interuniversity College, 2004.
- [15] Endler PC. Working and writing scientifically in complementary medicine and integrated health sciences. Graz, Austria: Interuniversity College, 2004.
- [16] Kratky KW. Complementary medicine systems. Comparison and integration. New York, Nova Sci, 2008.
- [17] Pass PF. Fundamentals of depth psychology. Therapeutic relationship formation between self-awareness and casework. Graz, Austria: Interuniversity College, 2004.
- [18] Spranger HH. Fundamentals of regulatory biology. Paradigms and scientific backgrounds of regulatory methods. Graz, Austria: Interuniversity College, 2004.

- [19] Struve F. Clinical holistic medicine: Psychodynamic short-time therapy complemented with bodywork. A clinical follow-up study of 109 patients. Dissertation. Graz: Interuniversity College, 2008.
- [20] Torp M. Clinical holistic medicine (mindful, short-term psychodynamic psychotherapy complemented with bodywork) in the treatment of experienced impaired sexual functioning. Dissertation. Graz: Interuniversity College, 2008.
- [21] Thegler S. Clinical holistic medicine (mindful, short-term psychodynamic psychotherapy complemented with bodywork) improves quality of life, health, and ability by induction of Antonovsky-salutogenesis. Dissertation. Graz: Interuniversity College, 2008.
- [22] Andresen T. Clinical holistic medicine (mindful, short-term psychodynamic psychotherapy complemented with bodywork) in the treatment of experienced physical illness and chronic pain. Dissertation. Graz: Interuniversity College, 2008.
- [23] Jacobsen S. Clinical holistic medicine (mindful, short-term psychodynamic psychotherapy complemented with bodywork) in the treatment of experienced mental illness. Dissertation. Graz: Interuniversity College, 2008.
- [24] Enevoldsen L. Self-reported low self-esteem. Intervention and follow-up in a clinical setting. Dissertation. Graz: Interuniversity College, 2008.
- [25] Ægidius H. A review and integrative analyses of ancient holistic character medicine systems. Dissertation. Graz: Interuniversity College, 2008.
- [26] Nielsen ML. Advanced tools for holistic medicine. Dissertation. Graz: Interuniversity College, 2008.
- [27] Ventegodt, S, Andersen, NJ, Kandel, I, Merrick, J. The open source protocol of clinical holistic medicine. *J Altern Med Res* 2009. In press.
- [28] Ventegodt S, Clausen B, Merrick J. Clinical holistic medicine: Pilot study on the effect of vaginal acupressure (Hippocratic pelvic massage). *ScientificWorldJournal* 2006;6:2100-16.
- [29] Ventegodt S, Kandel I, Merrick J. A study in experienced chronic pain in the holistic medicine clinic using mindful psychodynamic short time psychotherapy complemented with bodywork. *J Pain Manage* 2008;1(1):55-62.
- [30] Ventegodt S, Thegler S, Andreasen T, Struve F, Enevoldsen L, Bassaine L, Torp M, Merrick J. Clinical holistic medicine: Psychodynamic short-time therapy complemented with bodywork. A clinical follow-up study of 109 patients. *ScientificWorldJournal* 2006;6:2220-38.
- [31] Ventegodt S, Thegler S, Andreasen T, Struve F, Enevoldsen L, Bassaine L, Torp M, Merrick J. Clinical holistic medicine (mindful, short-term psychodynamic psychotherapy complemented with bodywork) in the treatment of experienced physical illness and chronic pain. *ScientificWorldJournal* 2007;7:310-6.
- [32] Ventegodt S, Thegler S, Andreasen T, Struve F, Enevoldsen L, Bassaine L, Torp M, Merrick J. Clinical holistic medicine (mindful, short-term psychodynamic psychotherapy complemented with bodywork) in the treatment of experienced mental illness. *ScientificWorldJournal* 2007;7:306-9.
- [33] Ventegodt S, Thegler S, Andreasen T, Struve F, Enevoldsen L, Bassaine L, Torp M, Merrick J. Clinical holistic medicine (mindful, short-term psychodynamic psychotherapy complemented with bodywork) in the treatment of experienced impaired sexual functioning. *ScientificWorldJournal* 2007;7:324-9.
- [34] Ventegodt S, Thegler S, Andreasen T, Struve F, Enevoldsen L, Bassaine L, Torp M, Merrick J. Clinical holistic medicine (mindful, short-term psychodynamic psychotherapy complemented with bodywork) improves quality of life, health, and ability by induction of Antonovsky-salutogenesis. *ScientificWorldJournal* 2007;7:317-23.
- [35] Ventegodt S, Thegler S, Andreasen T, Struve F, Enevoldsen L, Bassaine L, Torp M, Merrick J. Self-reported low self-esteem. Intervention and follow-up in a clinical setting. *ScientificWorldJournal* 2007;7:299-305.
- [36] Ventegodt S, Andersen NJ, Merrick J. Clinical holistic medicine in the recovery of working ability. A study using Antonovsky salutogenesis. *Int J Disabil Hum Dev* 2008;7(2):219-22.
- [37] Struck P, Ventegodt S. Clinical holistic medicine: Teaching orgasm for females with chronic anorgasmia using the Betty Dodson method. *ScientificWorldJournal* 2008;8:883-95.
- [38] Grof S. Implications of modern consciousness research for psychology: Holotropic experiences and their healing and heuristic potential. *Humanistic Psychol* 2003;31(2-3):50-85.
- [39] Grof S. *Realms of the human unconscious: Observations from LSD research*. New York: Viking Press, 1975.
- [40] Grof S. *The human encounter with death*. New York: EP Dutton, 1977.
- [41] Grof S. *LSD psychotherapy: Exploring the frontiers of the hidden mind*. Pomona, CA: Hunter House, 1980.
- [42] Grof S. *Beyond death: The gates of consciousness*. London: Thames Hudson, 1980.
- [43] Grof S. *Ancient wisdom and modern science*. Albany, NY: State Univ New York Press, 1984.
- [44] Grof S. *Beyond the brain: Birth death and transcendence in psychotherapy*. Albany, NY: State Univ New York Press, 1985.
- [45] Grof S. *Human survival and consciousness evolution*. Edited with Marjorie L. Valier. Albany, NY: State Univ New York Press, 1988.
- [46] Grof S. *The adventure of self-discovery: Dimensions of consciousness and new perspectives in psychotherapy*. Albany, NY: State Univ New York Press, 1987.

- [47] Grof S. *Spiritual emergency: When personal transformation becomes a crisis*. Los Angeles, CA: Jeremy P Tarcher, 1989.
- [48] Grof S. *The stormy search for the self: A guide to personal growth through transformative crisis*. Los Angeles, CA: Jeremy P Tarcher, 1990.
- [49] Grof S. *The holotropic mind: The three levels of human consciousness and how they shape our lives*. San Francisco: Harper Collins, 1992.
- [50] Grof S. *Books of the dead: Manuals for living and dying*. New York: Thames Hudson, 1994.
- [51] Grof S. *The thirst for wholeness: Attachment addiction and the spiritual path*. San Francisco: Harper Collins, 1993.
- [52] Grof S. *The transpersonal vision*. New York: Sounds True Incorp, 1998.
- [53] Grof S. *The cosmic game: Explorations of the frontiers of human consciousness*. Albany, NY: State Univ New York Press, 1998.
- [54] Grof S. *The consciousness revolution: A transatlantic dialogue*. Alameda CA: Hunter House, 1999.
- [55] Grof S. *Psychology of the future: Lessons from modern consciousness research*. Albany, NY: State Univ New York Press, 2000.
- [56] Grof S. *Caterpillar Dreams*. London: Hanford Mead Publishers, 2004.
- [57] Grof S. *When the impossible happens: Adventures in non-ordinary reality*. New York; Sounds True Incorp, 2005.
- [58] Hermansen TD, Ventegodt S, Rald E, Clausen B, Nielsen ML, Merrick J. Human development I: twenty fundamental problems of biology, medicine, and neuropsychology related to biological information. *ScientificWorldJournal* 2006;6:747-59.
- [59] Ventegodt S, Hermansen TD, Nielsen ML, Clausen B, Merrick J. Human development II: we need an integrated theory for matter, life and consciousness to understand life and healing. *ScientificWorldJournal* 2006;6:760-6.
- [60] Ventegodt S, Hermansen TD, Rald E, Flensburg-Madsen T, Nielsen ML, Clausen B, Merrick J. Human development III: bridging brain-mind and body-mind. introduction to "deep" (fractal, poly-ray) cosmology. *ScientificWorldJournal* 2006;6:767-76.
- [61] Ventegodt S, Hermansen TD, Flensburg-Madsen T, Nielsen ML, Clausen B, Merrick J. Human development IV: the living cell has information-directed self-organisation. *ScientificWorldJournal* 2006;6:1132-8.
- [62] Ventegodt S, Hermansen TD, Flensburg-Madsen T, Nielsen ML, Clausen B, Merrick J. Human development V: biochemistry unable to explain the emergence of biological form (morphogenesis) and therefore a new principle as source of biological information is needed. *ScientificWorldJournal* 2006;6:1359-67.
- [63] Ventegodt S, Hermansen TD, Flensburg-Madsen T, Nielsen M, Merrick J. Human development VI: Supracellular morphogenesis. The origin of biological and cellular order. *ScientificWorldJournal* 2006;6:1424-33.
- [64] Ventegodt S, Hermansen TD, Flensburg-Madsen T, Rald E, Nielsen ML, Merrick J. Human development VII: A spiral fractal model of fine structure of physical energy could explain central aspects of biological information, biological organization and biological creativity. *ScientificWorldJournal* 2006;6:1434-40.
- [65] Ventegodt S, Hermansen TD, Flensburg-Madsen T, Nielsen ML, Merrick J. Human development VIII: A theory of "deep" quantum chemistry and cell consciousness: Quantum chemistry controls genes and biochemistry to give cells and higher organisms consciousness and complex behavior. *ScientificWorldJournal* 2006;6:1441-53.
- [66] Ventegodt S, Hermansen TD, Flensburg-Madsen T, Rald E, Nielsen ML, Merrick J. Human development IX: A model of the wholeness of man, his consciousness and collective consciousness. *ScientificWorldJournal* 2006;6:1454-9.
- [67] Hermansen TD, Ventegodt S, Merrick J. Human development X: Explanation of macroevolution — top-down evolution materializes consciousness. The origin of metamorphosis. *ScientificWorldJournal* 2006;6:1656-66.
- [68] Hermansen TD, Ventegodt S, Kandel I. Human development XI: the structure of the cerebral cortex. Are there really modules in the brain? *ScientificWorldJournal* 2007;7:1922-9.
- [69] Ventegodt S, Hermansen TD, Kandel I, Merrick J. Human development XII: a theory for the structure and function of the human brain. *ScientificWorldJournal* 2008;8:621-42.
- [70] Ventegodt S, Hermansen TD, Kandel I, Merrick J. Human development XIII: the connection between the structure of the overtone system and the tone language of music. Some implications for our understanding of the human brain. *ScientificWorldJournal* 2008;8:643-57.
- [71] Polewka A, Maj JC, Warchol K, Groszek B. [The assessment of suicidal risk in the concept of the presuicidal syndrome, and the possibilities it provides for suicide prevention and therapy--review] *Przegl Lek.* 2005 ;62:399-402.
- [72] Qin P, Nordentoft M. Suicide risk in relation to psychiatric hospitalization: evidence based on longitudinal registers. *Arch Gen Psychiatry* 2005;62(4):427-32.
- [73] Ventegodt S, Kandel I, Merrick J. Clinical holistic medicine (mindful short-term psychodynamic psychotherapy complimented with bodywork) in the treatment of schizophrenia (ICD10-F20/DSM-IV Code

- 295) and other psychotic mental diseases. *ScientificWorldJournal* 2007;7:1987-2008.
- [74] Ventegodt S, Morad M, Merrick J. Clinical holistic medicine: Induction of spontaneous remission of cancer by recovery of the human character and the purpose of life (the life mission). *ScientificWorldJournal* 2004;4:362-77.
- [75] Ventegodt S, Solheim E, Saunte ME, Morad M, Kandel I, Merrick J. Clinical holistic medicine: Metastatic cancer. *ScientificWorldJournal* 2004;4:913-35.
- [76] Ventegodt, S Jacobsen, S Merrick, J. Clinical holistic medicine: A case of induced spontaneous remission in a patient with non-Hodgkin B-lymphoma. *J Altern Med Res* 2009, in press.
- [77] Ventegodt S, Andersen NJ, Merrick J. Rationality and irrationality in Ryke Geerd Hamer's System for holistic treatment of metastatic cancer. *ScientificWorldJournal* 2005;5:93-102.
- [78] Ventegodt S, Flensburg-Madsen T, Andersen NJ, Morad M, Merrick J. Clinical holistic medicine: A Pilot on HIV and quality of life and a suggested treatment of HIV and AIDS. *ScientificWorldJournal* 2004;4:264-72.

Submitted: February 01, 2009.

Revised: March 06, 2009.

Accepted: March 10, 2009.