Positive effects, side effects, and adverse events of clinical holistic medicine. A review of Gerda Boyesen's non-pharmaceutical mind-body medicine (biodynamic body-psychotherapy) at two centers in the United Kingdom and Germany

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Abstract: To review adverse events of intensive, clinical holistic medicine (CHM) as it is practiced in holistic body-psychotherapy in England and Germany. Gerda Boyesen's "biodynamic bodypsychotherapy" (BBP) is an intensive type of holistic mind-body medicine used by Boyesen at two centers. Methods: About 13,500 patients were treated during 1985-2005 period and studied for side effects and adverse events. The first author worked closely with Boyesen 1995-2005 with full insight in all aspects of the therapy and provided the data on side-effects. Results: Therapy helped chronic patients with physical, psychological, sexual, psychiatric and existential problems to improve health, ability, and quality of life (NNT (number needed to treat) = 1-3). Effective in the treatment of mentally ill patients (schizophrenia, anxiety, poor mental health, low general ability). For retraumatization, brief reactive psychosis, depression, depersonalization and derealization, implanted memories, side effects from manipulations of the body, suicide/suicide attempts, hospitalization for physical and mental health problem during or 90 days after treatment, NNH (number needed to harm) > 13,500. Interpretation: Intensive, holistic non-drug medicine is helpful for physical, sexual, psychological, psychiatric and existential problems and is completely safe for the patient. The therapeutic value TV = NNH/NNT > 5,000. Altogether about 18,000 patients treated with different subtypes of CHM in four different countries have now been evaluated for effects, side effects and adverse events, with similar results.

Keywords: mind-body medicine, clinical medicine, clinical holistic medicine, CAM, integrative medicine

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INTRODUCTION

In 2000 David S Sobel praised what he called nonpharmacologic medicine-often called non-drug medicine in Europe—in the Journal of the American Medical Association: "What if there was a new medical treatment that had been shown in clinical trials to improve health outcomes in a number of illnesses, speed post-surgical recovery, reduce unnecessary procedures, decrease medical costs, and improve patient satisfaction? And what if its major sequelae were that patients felt less isolated, more confident, satisfied, and happier, all without adverse effects? These benefits (and many others) result from a variety of nonpharmacologic mind/body and behavioral medicine treatments. An increasing number of studies, including randomized clinical trials, point to safe and relatively inexpensive interventions that can improve health outcomes and reduce the need for more expensive medical treatments" (1).

Sobel stated this after documenting that mind-body medicine often is efficient, has no side effects and is much more costeffective and therefore much cheaper than biomedicine (2). Since then many more studies has shown the same (3-12), and dozens of papers have documented many unexpected, serious problems with the biomedical drugs and surgery (12-32). The drugs used for i.e. cancer, schizophrenia, and depression have been found only slightly better than placebo (33-35), and the adverse effects have been found to burden at least half the patients using these drugs (i.e. a NNH (number needed to harm) = 2for antipsychotics (34).

The problem with non-drug medicine has been that the whole area has been mysterious, the names and labels strange, the procedures outlandish, and the documentation of poor standard compared to the RCTs with thousands of participants

we are used to get from the financially strong, industrial research. In most studies of non-drug medicine there are 20 or 50 patients. For many diseases we still only got case studies, or case series reports. So in a paradoxical way we are now very certain that "the drugs don't work" (36), but not so certain that non-drug medicine works.

To understand what works in holistic therapy and why, we have tried to identify the fundamental healing principles of nondrug medicine. The EU-university of CAM (complementary and alternative medicine), Interuniversity College, Castle of Seggau, Graz, has done the Hercularian task of collecting all existent knowledge of CAM from 40 universities and academic institution all over Europe, and integrated this into the EU-master's program of complementary. psychosocial, and integrative health sciences (EU-MSc-CAM) (37). This body of knowledge has crystallized five core principles of healing (see table 1) (38,39). The most important principle of these five is the principle of salutogenesis, the healing of the patient's whole existence as formulated by Aaron Antonovsky (1923-1994) around 1985 (40,41).

The healing principles make it possible to organize the different types of non-drug medicine into a simple scheme, where medicine can work on the chemical level, on the bodily level, the mental level, the spiritual level, or the level of wholeness of the patient (the existential or "holistic" level, including aspects of the patient's love, consciousness, and sexuality) (see table 2).

We have analyzed the different types of medicine in order to find which of the healing CAM-principles are used in each type, and we have identified six classes (class 2-7 in table 2). In class 2-4 one single principle seems to be used, and the therapy

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Table 1. The five central principles of healing in non-drug therapy (i.e. clinical medicine, holistic medicine, clinical holistic medicine, and CAM; see the major categories in table 2) from the curriculum of the EU-master in CAM

- 1. The principle of salutogenesis: the whole person must be healed (existential healing), not only a part of the person. This is done by recovering the *sense of coherence*, character and purpose of life of the person.
- 2. The similarity principle: only by reminding the patient (or his body, mind or soul) of what made him ill, can the patient be cured. The reason for this is that the earlier wound/trauma(s) live in the subconscious (or body-mind).
- 3. The Hering's law of cure (Constantine Hering, 1800-1880): that you will get well in the opposite order of the way you got ill.
- The principle of resources: only when you are getting the holding/care and support you did not get when you became ill, can you be healed from the old wound.
- 5. The principle of using as little force as possible (primum non nocere or first do no harm), because since Hippocrates (460-377 BCE) "declare the past, diagnose the present, foretell the future; practice these acts. As to diseases, make a habit of two things to help, or at least to do no harm" has been paramount not to harm the patient or running a risk with the patient's life or health.

Table 2. Classification of medicine according to the use of the healing principles of CAM into seven principal classes

- 1. Chemical medicine (biomedicine, herbal medicine with bioactive molecules)
- 2. Body-medicine (massage, reflexology, physical therapy, physiotherapy, spa, sauna etc)
- 3. Mind-medicine (psychotherapy psychodynamic, cognitive, gestalt etc.- psychoanalysis, meditation, no-touch sexology, couching, healing music)
- 4. Spirit-medicine (philosophical interventions, energy medicine, prayers, spiritual healing (i.e. Reichi), shamanism, spiritual CAM (i.e. crystal healing) etc.)
- Mind-body medicine (acupuncture, acupressure, chiropractics, homeopathy, manual sexology, body-psychotherapy, Reichian bodywork, Rosen therapy, ergo therapy etc.)
- 6. Holistic (body-mind-spirit/existential) medicine (holistic medicine, clinical medicine, clinical holistic medicine, holistic body-psychotherapy, holistic bodywork, the sexological examination, holistic mind-body medicine, biodynamic bodypsychotherapy, tantric bodywork and massage, holistic sexology, Native American rituals).
- Chemical-body-mind-spirit medicine (Shamanism with peyote, Ayahuasca, magic mushrooms, Grof's LSD-psychotherapy etc) (44-61)

is not likely to have a large healing potential. In class 5, mind-body therapy, most of the healing principles are in use, and in class 6 and 7, all the five healing principles are believed to be in active use.

We therefore expect class 2, 3, and 4 to be little effective, class 5 to be effective, and class 6 and 7 to be highly effective. Class 7 might be impossible to use as medicine for modern man, leaving us with a natural

focus on class 6-methods, the holistic methods that intervene on body, mind, and spirit at the same time.

Most interesting, this type of medicine is identical with the original medicine of the Hippocratic tradition (42) that for more than two millennia was the dominant type of medicine in Europe. Most pre-modern societies had this kind of medicine-China (acupuncture, yin-yang), India (ayurveda), and South America (Native North American medicine men and shamanism), Africa (the Sangomas), Australia (the aboriginal healers), and the Nordic countries (the druids, witches and Samic shamans) (43). As these cultures' medical systems all developed very much into the same type of holistic medicine, we take this as a strong indication of this kind of medicine being highly effective and very safe, in accordance with the statement of Sobel above.

HOLISTIC MEDICINE

The aim of this review was therefore to look at the positive effects and adverse effects/side effects including adverse event of intensive clinical holistic therapy. We have already documented the experience with this kind of medicine in our own clinic in Denmark (62-69), at the center for holistic mind-body medicine and clinical medicine in Sweden established by Bengt Stern (70-74). In this paper we want to document the experiences with this kind of therapy as practiced in United Kingdom and Germany. We have chosen to focus on Gerda Boyesen's biodynamic bodypsychotherapy, a subtype of intensive, integrative medicine that only involves talk and touch therapy in a holistic philosophical context. Gerda Boyesen's type of bodypsychotherapy 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 unconsciously held by the body's tissues. We believe that all five healing principles (see table 1) are in use in this kind therapy.

Gerda Boyesen (1922-2005) worked in the tradition of holistic medicine, especially the different kinds of psychodynamic psychotherapy, therapeutic bodywork, bodypsychotherapy, healing massage, acupressure and body-energy-work that was pioneered in the last century by Wilhelm Reich, Alexander Lowen, Marion Rosen, Stanislav Grof, Lillemor Johnsen and many more (see Reich, 1969 for an introduction to this kind of therapy (75)). The Gerda Boyesen Centers are institutes for advanced self-exploration (76-79). The basic principle is clinical medicine (80.81), where salutogenesis (existential healing) happens because the therapist supports the patient's selfexploration. The first center, Acacia was established in England in 1985 by the physiotherapist Gerda Boyesen; ten years later she founded yet another similar center, Biozen, Witten Herdiger in Germany. The therapy included the patient's body, mind, and spirit and is therefore 'holistic medicine'. During the 20 years centers were lead or supervised by Gerda Boyesen about 13,500 patients were treated. She founded the centers and developed the methods further. After more than 20 years as leader in the field she passed away in 2005, but the centers have continued their work. The first author is today the leader of the Eta Wegman Academy, Graz in Austria, trained by Gerda Boyesen and worked closely together with Boyesen for her last 10 years, 1995-2005.

Body-psychotherapy

Today body-mind medicine is also known as holistic medicine, body-oriented psychotherapy, clinical medicine, or somatic

psychology. Bodypsychotherapy in its modern form is a branch of psychodynamic psychotherapy with origins in the work of Pierre Janet, Sigmund Freud and Wilhelm Reich (75-94). Traditional holistic treatment of body, mind, and spirit at the same time has continued until today and has taken many different forms.

In contemporary medical science, holistic medicine is defined as therapy that includes intervention on body mind and spirit. If it employs the healing principles of CAM (see table 1) and uses the patient's self exploration as the main principle of healing, holistic medicine is also clinical medicine, and we then label it holistic clinical medicine or 'clinical holistic medicine' (CHM), which is almost identical to the kind of body psychotherapy that is practiced by the more spiritual of the bodypsychotherapists, including mindfulness meditation similar to Bengt Stern's holistic therapy in Sweden (71-74). Body psychotherapy addresses the body and the mind at the same time. It focuses on the patient's body, sexuality, body language, emotional expressions, psychosomatic manifestations, conscious and unconscious mind, and philosophy of life (76-79).

One branch of body psychotherapy evolved from the work of Wilhelm Reich (1897-1957), who worked and trained therapists in Berlin, Copenhagen, Oslo and USA during many years from 1920-1956 (75). From this work came bioenergetic analysis, developed by Alexander Lowen and John Pierrakos, and the modern science of sexology developed further by Masters and Johnson.

Body psychotherapy itself is now becoming recognized as a mainstream branch of psychotherapy, and bodypsychotherapists has organized in a number of national and international organizations like the "United States (US) Association for Body Psychotherapy (USABP)" and the "European Association for Body Psycho-(EABP)". therapy Many national organizations exist, like the European School Biodynamic Psychology (ESBPE) in Germany. The USABP has its own scientific Journal of Body Psychotherapy, as have other organizations. A large number of schools and training centers all over the world train thousands of new body workers, like the Cambridge Body Psychotherapy Center, the Chiron Center for Body Psychotherapy, the Gerda Boyesen Institute, the Gerda Boyesen International Institute, and the London School of Biodynamic Psychotherapy. In Switzerland, Gerda Boyesen's biodynamic bodypsychotherapy is now covered by health care insurance and is on the verge of being accepted as one of the first methods in alternative medicine.

Body psychotherapy borders with fields like somatic psychology, energy medicine, Eastern medicines and philosophies, voga, acupuncture, tai chi chuan, other 'body therapies' like massage, physiotherapy, and sexology. Body psychotherapy integrates Alexander technique, Feldenkrais' method, Rolfing, and techniques from holistic manual sexology like the sexological examination. Today many different branches exist, like biosynthesis (David Boadella) biodynamic body-psychotherapy (Gerda Boyesen, Charlotte Allmer), synergy (Rubenfeld), body-mind psychotherapy (Susan Aposhyan), the Nordic School of Clinical Holistic Medicine (Søren Ventegodt, Joav Merrick, and Niels Jørgen Andersen), and holistic mind-body medicine (Bengt Stern). Several of these, if not all, have been influenced by the work of Wilhelm Reich, but were also considerably influenced by other people and their methods, especially the traditional holistic medicine of Hippocrates.

Body psychotherapy is very useful in the treatment of trauma (84-91). Recently research has documented the efficacy of body psychotherapy with many different patient groups including schizophrenia (4,92). Body-psychotherapy seems to be rather efficient in helping and healing the patient with NNTs (number needed to treat) from 1-3, often 2. This is remarkably good, compared with the NNTs of 5, 10, and 20, which are normal in biomedicine (33-36). Therefore, the prevalence of side effects and adverse events becomes very important.

Biodynamic Body Psychotherapy

Gerda Boyesen (1922-2005) is one of the founders of modern body-psychotherapy. Gerda Boyesen became an honorary member of the EABP, as well as the honorary president of the German Gesellschaft für Biodynamische Psychologie (Society for Biodynamics Psychology), the professional association for biodynamics body-psychotherapists in Germany. She was born in Bergen, Norway and strongly inspired by Reich and Ola Raknes, a vegetotherapist who had been trained by Reich. She studied psychology in Oslo and received further training as physical therapist, which led her to work with Aadel Bülow-Hansen (1906-2001).

In her therapy, Boyesen focused on the connection between repressed emotions and muscle tensions as described in her book "Über den Körper die Seele heilen" (78). Gerda Boyesen founded "Biodynamics Psychology and Psychotherapy". In 1968 she left for London and opened a practice and in 1985 an international teaching and training institute. In addition to client-oriented work other focus areas were included, most notably she was the first woman in Europe to establish her own psychotherapeutic training institute. Gerda Boyesen lived and worked in different,

mostly European, countries, however, her work influenced body psychotherapy worldwide. Her books were translated into other languages. She trained psychotherapists over several decades and throughout her life she continued to develop her ideas and methods.

The therapy. This psychodynamic bodypsychotherapy is of the Jungian and Reichian 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 conversation therapy. The healing has three phases: 1) feel, 2) understand and 3) let go (93,94). Some techniques are based on Swedish massage, which usually involves a massage table and direct skin-to-skin contact and manipulation.

LITERATURE REVIEW

In general, mind-body medicine has proven effective in many diseases: "Drawing principally from systematic reviews and meta-analyses, there is considerable evidence of efficacy for several mind-body therapies in the treatment of coronary artery disease (eg, cardiac rehabilitation), headaches, insomnia, incontinence, chronic low back pain, disease and treatment related symptoms of cancer, and improving post-surgical outcomes. We found moderate evidence of efficacy for mind-body therapies in the areas of hypertension and arthritis" (3).

Today around 100 papers have been published in PubMed/Medline on "body-psychotherapy" and many more reviews of mind-body medicine, which again is a subcategory under non-drug medicine. Röhricht et al (4) concluded that "in

patients with chronic schizophrenia, body oriented psychological interventions may be effective for both positive therapeutic changes in ego-pathology and negative symptoms, even though these effects are not necessarily related." Levy Berg (5) found a positive effect on anxiety: "It is concluded that treatment preferences may have considerable interpersonal potential in therapy; how therapists utilize this potential may be important for improving outcome."

Koemeda-Lutz (6) found in a large multicenter study from three German and five Swiss member institutes of the EABP, where patients with poor mental health and general ability was treated with body-psychotherapy, that "at the end of therapy or after two years of treatment at maximum (n = 160) large effect sizes are attained in all scales. These are lasting results according to catamnestic data (n = 42). This naturalistic prospective field study claims to supply evidence for the effectiveness of the evaluated body-psychotherapeutic methods and to classify as phase IV- ('routine application') and level I-evidence."

If you look at the effect of CHM in general, several studies have been conducted in Sweden and Denmark investigating the efficacy and side effects of the therapy. One study of 107 consecutively chosen patients that entered the therapy described the health status and quality of life of the participants as low and similar to mentally ill patients when they entered the treatment (72). Another study documented that therapeutic effect on quality of life and sense of coherence normalized for 83 patients after therapy (73). From the data, NNT = 1-3 was estimated for improvement of quality of life and subjective mental health.

A new dissertation (74) under the auspices of the Karolinska Institutet in Sweden based upon these findings concluded that the holistic 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. The actual intervention in Sweden is described in details in the book "Feeling bad is a good start" (71). No significant side effects or adverse events were found except from very rare, small fast-healing bone fractures (of the ribs) from high-energy manipulations (NNH>1,000) that healed so fast that they were not considered a significant side effects (70).

A similar investigation at our own clinic in Denmark of CHM did not find any significant side effects or negative events, but this was done on only 500 patients. A number of small studies on the treatment of physical, mental, sexual, existential, psychological, and working ability problems all documented no adverse effects and no adverse events (67-69). It is also known that similar interventions with holistic sexology had no side effects or negative effects (95,96).

Altogether, about 18,000 patients treated with different subtypes of clinical holistic medicine have now been evaluated for effects, side effects and adverse events, with similar results—CHM has no significant side effects or adverse events.

DATA COLLECTION ON SIDE EFFECTS FOR THIS REVIEW

Data were collected by the second author when interviewing Charlotte Allmer, which happened at several occasions. First in connection with the first author's participation in the examination of students from the Nordic Campus of Interuniversity College, Castle of Seggau, Graz in 2008, where the first author met Charlotte Allmer in person, and after that a complementary interview in March 2009, where all numbers of patients with all significant side effects and life events (like suicide-

attempts, suicides, hospitalization, brief reactive psychoses etc) were reviewed. This allowed for this review to include all patients treated from January 1985 to December 2005. The data (table 2 and 3 and the description of the results) was sent to Charlotte Allmer for final correction and approval.

As significant side effects and adverse events are easy to identify and remember and as they obviously always make a lasting impression on the therapists, since they used every event to learn from in order to improve the therapy. The total number of patients is calculated from the average number of patients each year. During the therapy data of side effects and adverse events was documented in the case record. The most difficult aspect of the adverse events is the possibility of the therapy provoking patients to commit suicide. To investigate this, we send some of the therapists working in the centers in that period a short questionnaire with the following questions:

- 1. How many percent (estimated) of the patients thought about suicide at the start of the therapy?
- 2. How many percent (estimated) of the patients had tried to commit suicide before start of therapy?
- 3. How many percent (estimated) had decided to commit suicide before start of the therapy?
- 4. How many percent (estimated) had a plan for the suicide before they started therapy?
- 5. How many patients tried in the year 1985-2005 (Acacia) 1995-2005 (Biozen) to commit suicide during or the first three months after end of therapy?
- 6. How many patients did in the year 1985-2005 (Acacia) 1995-2005

(Biozen) commit suicide during or the first three month after end of therapy?

The information about suicide in table 5 is based on these estimates; the data are still being collected, and we plan to present a more accurate analysis of the ability of the therapy to prevent suicide in another paper.

Quality of data

Data of side effects and adverse events are not so easy to collect, as they are often not part of the patient's case record. Therefore, if you want to collect these data, you need to go to the therapists' supervisor and only if the therapist has fill trusts in his or her supervisor will these things be shared. Fortunately Gerda Boyesen had her therapist's trust and they shared everything with her. As she personally supervised all therapists and traveled back and forth between England and Germany to do so, we know that Boyesen herself had perfect insight into these aspects of the therapy. Most unfortunately Boyesen passed away before this study was done, but she noticed in her books that the therapy had no side effects. Our most valuable source of information is not her writings, which were not detailed on this subject, but Charlotte Allmer, who worked closely together with Boyesen for the last 10 years of her life and in the period where Boyesen supervised to two centers. We believe the quality of the data from Allmer on side effects and adverse events to be of high quality and we have made an additional survey on suicide and suicide attempts to document that the therapy was actually preventing suicide.

Estimated number of patients treated.

As some years have gone since Boyesen passed away, the exact number of patients treated at the two centers in the periods C ALLMER ET AL 289

Table 3. Side effects/adverse effects caused by psychotherapy, bodywork, and psychotherapy combined with bodywork (80)

Psychotherapy

- 1. Re-traumatization
- 2. Brief reactive psychosis
- 3. Depression (and hypomania)
- 4. Depersonalization and derealization
- 5. Implanted memories and implanted philosophy
- 6. Iatrogenic disturbances
- 7. Negative effects of hospitalization
- Studies with no side effects, or side effects less than the side effects of drugs
- 9. Suicide and suicide attempts
- 10. 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.
- Damage to the body if the therapist is unaware of illnesses or for example fractures.
- 4. Suicide and suicide attempts

Psychotherapy and bodywork/ holistic medicine (i.e. manual sexology like the sexological examination, clinical holistic medicine (CHM), and holotropic breath work)

- 1. Brief reactive psychosis
- 2. Implanted memories and implanted philosophy
- 3. (Developmental crises)
- 4. Suicide and suicide attempts

1985-2005 (Acacia in London) and 1995-2005 (Biozen in Witten Herdiger) are not known anymore. But the number of hours of treatment of each patient, and the average number of therapist and active students are known. A normal treatment was 50 sessions during a year; psychotic patients often got 200 sessions a year for two or three years, or 250 hours of therapy, while minor problems was solved with 10 or 20 sessions of therapy. On average the

patents received 50 hours of therapy. Acacia had a minimum of 20 therapists and students per year, and each therapist treated between 10 and 20 patients a year. In Biozen, which was a much larger center, 50 therapists and students worked. Boyesen's principle was that students should treat for free, and many patients come in from the street to get treated for free by the students. The centers were therefore very active. Based on these data we know that Acacia

Table 4.	Side	effects/adverse	effects	caused	by	Gerda	Boyesen's	body-psychotherapy	on
13,500 P	atien	ts							

Side effects	N*	NNH**
1. Re-traumatization	0	> 13,500
a) Brief reactive psychosis, with no history of previous psychotic, mental illness	0	> 13,500
b) Brief reactive psychosis, with a history of previous psychotic, mental illness	0	> 13,500
4. Depression	0	> 13,500
5. Depersonalization and derealization	0	> 13,500
6. Implanted memories and implanted philosophy	0	> 13,500
7. Iatrogenic disturbances	0	> 13,500
8. a) Side effects from manipulations of the body: Insignificant	0	> 13,500
physical problems lasting less than one week (skin-abrasions, blue marks, and tenderness)		
b) Side effects from manipulations of the body: Problems lasting less than three months (fractures etc.)	0	> 13,500
c) Side effects from manipulations of the body: Permanent physical problems		> 13,500
9. Damage to the body if the therapists are unaware of illnesses, fractures, etc	0	> 13,500

^{*} Number of patients with side effects; ** number needed to harm

treated at least 300 patients a years, and Biozen 15x50=750 patients a year. In total about 6,000 patients were treated at Acacia and 7,500 patients in Biozen and therefore Gerda Boyesen supervised the treatment of about 13,500 patients during the period 1985-2005.

Table 4 shows that no patient had significant side effects from the therapy of Gerda Boyesen and her therapists at the two centers in United Kingdom and Germany. None suffered from retraumatization, understood as getting a new trauma on top of an old one, and therefore feeling worse after treatment than before. None of the participants suffered from "brief reactive psychosis" provoked by the therapy (see table 5), but many had psychosis when they started, which disappeared during the

therapy. Depression – meaning that a patient was more depressed after the treatment than before – did not happen, but many patients were cured for depression. None suffered from the experience of loosing themselves, but many found themselves and no patients got the impulse to commit suicide from the therapy (see table 5), but many patients let go of such impulses and cured from their negative wishes to die. In conclusion no patient suffered significant side effects or had adverse events from the therapy.

Prevention of suicide

Table 5 shows the adverse events from the CHM-therapy. None has ever, to the knowledge of Charlotte Allmer and the other therapists, attempted to commit

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Table 5. Adverse events during or three month after Gerda Boyesen's intervention with intensive, clinical holistic medicine on 13,500 patients

Adverse events			NNH**
1.	f	0	> 13,500
2.	Suicide attempt in relation to treatment up to 3 months after	0	> 13,500
	treatment	0	12.500
3.	Committed suicide in relation to treatment on the training site/during treatment	0	> 13,500
4.	Committed suicide in relation to treatment up to 3 months after treatment	0	> 13,500
5.	Hospitalization for physical health problem, during or up to 14 days after treatment	0	> 13,500
6.	Hospitalization for mental health problem during or up to 14 days after treatment	0	> 13,500

^{*}Number of patients with side effects; ** number needed to harm

suicide in the United Kingdom center or immediately after that in relation to the treatment. Quite contrary, a significant number of the patients, estimated about one each year in each centre, or about 30 patients, 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 during the first three month after the treatment. This strongly indicate that body clinical holistic medicine (holistic body psychotherapy) prevents suicide. The results from this survey will be presented in another paper.

All in all we found no significant side effects or adverse events from the treatment of 13,500 patients with intensive, clinical holistic therapy at Gerda Boyesen's two centers for body-psychotherapy.

DISCUSSION

The therapy seems to be life saving for some of the most ill patients. Taking this into consideration, and that the therapy had no side effects at all, the degree of intensity from the tools used seems balanced and reasonable. The most controversial idea in this work seems to be the necessity of the developmental crises (97,98). Gerda Boyesen's idea was that you have to confront the negative emotions, gestalts, and trauma to heal, thus she is in accordance with the old Hippocratic tradition. Accelerated personal development leads sometimes to intensive, existential crisis, and only if the patient is well guarded and well supported, can this kind of intensive healing be possible. Gerda Boyesen's Center seems to provide exactly this to its participants.

Combining the information that we now have from Bengt Stern's therapy in Sweden, from the CHM in Denmark, and from Gerda Boyesen's holistic therapy at two centers, we must conclude that even when we look at about 10,000 patients treated with CHM, we cannot find anyone who had side effects or adverse events from the therapy. This result allows us to conclude that holistic medicine with psychotherapy and bodywork (CHM) is a safe treatment. Reports that CHM also seems to prevent suicide in accordance with

earlier similar findings (70) makes it even safer, and makes it recommendable even for severely mentally ill patients, who are known often to commit suicide after initiation of psychiatric treatment and during hospitalization (99).

The healing potential of CHM has yet to be established. Single patients with cancer and schizophrenia have already been helped with this method, and the next logical step seems to study the effect of CHM more systematically with the most ill patients. In principle, even persons with HIV could be helped in this way (100).

This review found that at least one in two (NNT = 1-3) individuals were helped to improve their quality of life or physical or mental health or a similar dimension by Gerda Boyesen's CHM, with no significant side effect or adverse events conducted at centers in the United Kingdom and Germany. We found NNH > 13,500 for mental hospitalization and brief reactive psychosis. 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 30 of the 13,500 (and probably many more as this is not always revealed to the therapist) patients had decided to commit suicide before the course, but decided to let go of this decision during treatment, which is a very important finding. The existential healing crisis is not a side effect, but rather a part of the therapy. Former studies have shown that mental health, quality of life, and sexual functioning is normalized for most patients with CHM (NNT = 1-3). Combined with the complete lack of side effects and adverse events (1-11,70,71,75-81,101), we find it safe to conclude that intensive clinical holistic medicine is a safe and efficient help for patients with physical, mental, sexual, quality of life-related psychological, and existential problems.

Judged from the existing data, we recommend that CHM can also be used for severely mentally ill patients. We recommend immediate funding, national as well as private, for research that documents the effect of CHM for existential problems, sexual dysfunctions, and the more serious physical and mental diseases like diabetes type 1, schizophrenia, cancer, and HIV. Holistic medicine is safe and efficient compared with biomedicine, and treatments exist for a wide range of diseases and health problems. We recommend that mind-body medicine, clinical medicine, and holistic medicine become part of the curriculum of all medical schools.

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