

YOGA AND MENTAL ILLNESS

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1. Introduction

In May 2002, the first author presented a seminar entitled Yoga – Adjunct to Psychiatric Treatment and Yoga – Preventive Intervention. This was a lecture and demonstration held in Brisbane as part of the 37TH Annual Royal Australian College of Psychiatrists (RANZCP) conference. Associate Professor Gerard Byrne, Head of the Department of Psychiatry at the University of Queensland convened this meeting.

The lecture and demonstration was about the sequences of poses (asanas) described by BKS Iyengar in his book Yoga the Path to Holistic Health published by Dorling Kindersley¹. During the lecture the application of the poses from this book was administered by Jeremy Wallis of Yoga Health Studio, together with his team.

In October 2002, a series of six week trials were designed by the two authors. This was on a group of war veterans, exclusively male from mostly the Vietnam War. In the initial trial, whose participants were followed through until July 2003, the research on this one private practice began. There was difficulty in obtaining cooperation on firmly setting the parameters of the investigation, where agreed set procedures were not always implemented. However, each of these initial six sessions were recorded on video as well as the introductory and summary comments. BKS Iyengar himself, as well as his daughter Dr Geeta Iyengar cooperated on the application of modifications to augment the efficacy of the programme, and to overcome some difficulties that held back bends and forward bends caused in this older 50 plus group who were largely physically unfit. For this cooperation, the authors are grateful.

In July 2003, the first researcher started administering the six week research programmes herself continuing under the general direction of the second author. The Yoga approach of TKV Desikachar was applied as described by Gary Kraftsow in his book Yoga for Wellness². Again, his depression series was used. To this series was added a Yoga Nidra practice, Ham Sa meditation, Alternate Nostril breathing, long counted outbreath pranayama. The results, though starting on a much lower starting base than the original group, demonstrated the same tendency for complete recovery in six weeks. The only difference was that this last group were able to practice more at home because the asanas were easier to perform without props. The addition of Yoga Nidra and the other meditation practices, the participants were able to administer these procedures in the middle of the night when they woke up, and thus their night was far more peaceful, and something could be done to overcome flashbacks, insomnia and general distress at night.

In February 2004, one group of Qi Gong were compared with the ongoing Yoga group. Generally, the benefit of Qi Gong were similar to those of pranayama in that it helped insomnia, flashbacks and restless disturbed sleep, but did not improve

depression in a way that yoga poses did. Most of the patients did the yoga group as well as the Qi Gong group. It seems that if Qi Gong is going to be more effective much more diligent practice is required. [References ADD]

2. The Yoga Teacher Research Assistant

For those yoga teachers interested in being part of a research programme, there are some changes required from running a normal class that must be undertaken by the yoga teacher.

- The yoga teacher is part of a team doing research.
- A set programme is administered
- If for any reason the participant cannot do the programme, the programme is not modified, but the person does not continue in the trial after any remedial help has been organized.
- Problems encountered in the yoga group are referred to the head researcher who has clinical responsibility for the participants.
- Liaison amongst team members is important.
- This team approach is unusual for the yoga teacher who is not used to being part of a multidisciplinary team.
- Research narrowly restricts parameters so that certain aspects can be studied in detail.

3. Classification of Mental Disorders amenable to Yoga Augmentation

It is advised that Yoga be offered initially as augmentation to existing psychiatric treatment. For someone who is sick, Yoga must first aim at the removal of symptoms (Yoga Therapy) prior to the commencement of a general Yoga programme.

4. Relationship of Yoga Teacher to Psychiatrist or General Practitioner

Yoga is gaining in popular appeal, and much of the reticence about commencing a yoga class is being overcome as yoga is available in gyms, executives and important sports people do yoga. However, this so called familiarity with yoga may not be shared by the psychiatrist or general practitioner who may be treating the person who is mentally ill.

It is important not to create of tug-of-war between the treating medical practitioner and the yoga teacher. A warm friendly trusting relationship developed between the yoga teacher and the medical practitioner will bring about mutual education in each other's disciplines, and will be of benefit to the patient as well as a friendly cooperative relationship of liaison developing between the yoga teacher and the medical professional. There are also other practical concerns where a good relationship can lead to further referrals, and a liaison relationship that can benefit not only the patient but the yoga teacher and the medical professional.

Ultimately, the Yoga Teacher has a place in hospitals in Wellness Centres, part of treatment programmes. This is in its infancy in Brisbane, Australia at Greenslopes Private Hospital Wellness Programme, and Toowong Private Hospital programmes for Post Traumatic Stress Disorder and Alcohol Addiction treatment programmes.

The authors would like to see the Yoga teacher as part of the multidisciplinary team treating patients. It is important to design scales to evaluate the general areas of improvement most people who practice yoga regularly experience, but which improvement is not captured on general scales.

5. Existing Medical Programmes where Yoga is used

Since doing this research, it has come to our attention that using Yoga even formally is not new to Medicine. It turns up in a variety of ways:-

1. The Work of **Herbert Benson of The Relaxation Response**. This work appeared in the 1970's.³ Herbert Henson was a medical practitioner who was Associate Professor of Medicine at The Harvard Medical School and Director of the Hypertension Section of Boston's Beth Israel Hospital. This programme included yoga practices especially meditation, progressive muscular relaxation as is used in Yoga Nidra.
2. The work of **Dr Dean Ornish in Reversing Heart Disease**. This involves a yoga programme and Yoga diet, as well as some other practices and has enormously good results.⁴ Dr Dean Ornish MD., is president and director of the nonprofit Preventive Medicine Research Institute in Sausalito, California. He is assistant clinical professor of medicine at the School of Medicine, University of California, San Francisco, and an attending physician at California Pacific Medical Center. Dr Ornish received an MD from Taylor College of Medicine in Houston, was a clinical fellow in medicine at Harvard Medical School, and completed his internship and residency in internal medicine at the Massachusetts General Hospital in Boston. Since 1997, he has directed clinical research demonstrating – for the first time – that comprehensive lifestyle changes may begin to reverse the progression of even severe coronary heart disease, without cholesterol-lowering drugs, angioplasty, or coronary bypass surgery. His research has been published in *The Lancet*, the *Journal of the American Medical Association*, *Circulation*, the *American Journal of Cardiology*, and elsewhere.
3. The inclusion of yoga practices in **Cognitive Behaviour Therapy**. Many yoga practices are included in these programmes including even Alternate Nostril Breathing pranayama practice without attribution.
4. The work of **Professor Mark Williams**, psychologist, of the University of Wales in **Mindfulness Based Cognitive Therapy** in the prevention of relapse in depression (MBCT) which is the popular treatment for depression amongst many professionals these days. It is a blend of mindfulness meditation and cognitive behaviour therapy (which itself has incorporated much from yoga).
5. Finally, the work of the **Vivekananda Research Institute** in Yoga (note it is called Yoga) treatment of Asthma. I am aware that the Institute treat many other conditions including Anxiety and Depression, but the awareness of this treatment has not reached the International Journals published in the reading lists of the very helpful Yoga Research Education Center.

6. History of Psychiatry

Patients with psychiatric illness have been treated in different ways throughout the ages, and it is very informative and I believe indeed necessary for one to understand the history of one's own profession, and in dealing with members of that profession to understand its history.

The following general characteristics occur:

1. Societies are often kind or punitive towards the treatment of mental illness. The one society can change over time as has our own society where previously we had been quite punitive and institutionalised patients excessively.
2. Many societies have a taboo against mental illness.
3. Different races deal with their mentally ill patients in different ways, and as Australia is a multicultural society, it is appropriate to understand the attitudes of different races to mental illness.
4. Often those who treat the mentally ill carry the stigma of the mentally ill as is the case to some extent with psychiatrists who are feared and also this attitude to a lesser extent is applied to other associated professionals even in Australia.
5. Throughout history mental illness has been judged in religious terms and judged to be associated with demon possession. This attitude is prevalent in the Judaeo-Christian tradition, and in the Middle Ages through a document *Malleus Mallificarum*, those judged to be witches were burnt at the stake.

Beginnings of Psychiatry

In the very first civilizations of Egypt and the Middle East, mental illness was deemed to be caused by magical forces of malevolent deities, and the main therapists were priests who used religious and magical rites to counter these forces. Belief in those evil deities – called demons after the advent of Christianity – prevailed in many primitive societies; in the history of civilized societies, credence in demons fluctuated in complex ways.⁵

Greek and Roman Psychiatry

Psychiatry, in these civilizations, was based on religious practices for healing illness and schools of medicine and philosophy. Often medicine was part of philosophy.

Greek Psychiatry

Hippocrates (560-370 BCE)

He was a physician and the father of medicine. The Hippocratic Oath was founded on his teachings.

The Hippocratic Oath

I solemnly swear by all that I hold most sacred that to the best of my ability and judgement, I will keep this Oath and this Covenant:

I will be loyal to the Profession of Medicine and just and generous to its members,

I will by precept, discourse and instruction, written, oral and practical, assist in imparting knowledge of the Art to disciples similarly bound by Oath and Covenant according to the Law of Medicine.

I will follow that system of conduct and treatment which, according to my ability and judgement, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous.

I will give no deadly drug nor perform any operation for a criminal purpose, even if solicited, nor will I suggest any such counsel. With purity and holiness I will pass my life and practise my Art.

Into whatever houses I enter, I will go for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption.

Whatever in connection with my professional practice, or not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret.

While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art, respected by all men: but should I trespass and violate this Oath, may the reverse be my lot.

Those of us who are medical practitioners, or indeed all those involved in healing the sick would do well to consider and abide by this Oath.

Hippocratic theory is that the human body contains four essential humours: - phlegm, yellow bile, black bile and blood – and the secretion of these depend on the seasons. The brain was considered the seat of life. Diseases such as epilepsy, depression, mania, paranoia, organic toxic delirium, postpartum psychosis, phobias and hysteria were described by Hippocrates and other unknown authors around this time. Interestingly enough hysteria was said to be caused by a wandering uterus and was attributed to women only. These early writer associated melancholia with a poor appetite, despondency, sleeplessness, irritability, and restlessness, and they believed that personal hygiene, bathing, and dieting were essential to keep the humours in balance. Purgatives, blood letting and cathartics were used to overcome insanity.

Plato (427-347 BCE) and his student Aristotle (384-322 BCE) theorized about the soul and its divisions and Aristotle observed that the soul was susceptible to temperature, black bile, and the emotions. He was the first to describe accurately the affections of desire, anger, fear, courage, envy, joy, hatred and pity. The Greeks

developed the practices of inducing sleep, interpreting dreams, and using words to encourage, console, and gain knowledge of an illness (Plato's dialectics)

Roman Psychiatry

Galen of Pergamum (130-200 CE or AD) came from Asia Minor (Turkey) in the Roman Empire. He wrote "On the afflicted parts".⁶ He consolidated and augmented Greek medical and psychological thinking and developed the idea that depression was caused by the excess of black bile which was influential until the 19th century.

Middle Ages

The 1000 years after the fall of the western Roman empire (400-1400 AD or CE), there was an Arab Islamic empire extending from the Near East to Spain, an eastern Christian Byzantine empire, and the Christian western European feudal kingdoms.

St Augustine (354-430 AD) from Tageste (Numidia, North Africa), the son of St Monica, an example of an optimistic, patient, prayerful person, wrote his "Confessions"⁷ There are many translations of this seminal work including a Penguin one. His "Confessions" was the first book centring of psychological introspection.

Avicenna (980- 1037 AD): He originated in Persia. He wrote a treatise entitled "The Canon of Medicine"⁸ His Canon of Medicine recognized that certain physical diseases were caused by emotional upsets and was widely read by Christian and Muslim physicians.

Islam, throughout the Middle Ages held that society is responsible for the kindly care of the insane. The Arabs built hospitals and psychiatric divisions in Baghdad (750) and Cairo (873); they also built special insane asylums in Damascus (800), Aleppo (1270), and the Muslim-ruled Spanish city of Grenada (1356).

Christian Attitudes: Throughout the Middle Ages, Christian attitudes fluctuated between rejection and tolerance. The insane were thought to be possessed of demons, and therefore had to be enclosed. Two famous institutions were "Bedlam" in England and "The Salpêtrière" in France. In France Pinel removed the chains from the inmates, and was almost lynched, and it was the inmates who demonstrated compassion and saved him from the locals.

Renaissance

Witches: *Malleus Maleficarum* (Witches Hammer) was published by Henry Kramer and James Sprenger. They were two theologians appointed by the Pope to investigate witchcraft. Witches were mainly women, and a witch hunting craze developed resulting in the execution of many thousand witches, and abated only after 150 years.

Seventeenth Century

The French rather than other Europeans incarcerated the insane, and the Salpêtrière has already been mentioned in this regard.

Eighteenth Century

Terminology and classification was important in this period with Sauvages in France, Cullen in England, and Gall with Phrenology in Germany. The treatment involved much physical restraint, beatings, and constant fear mostly amongst the inmates.

Early Nineteenth Century

Esquirol in France, Samuel Tuke in England, Benjamin Rush, Johan Heinroth in Germany lived in this period. The American Psychiatric Association was formed.

Late Nineteenth Century and Early Twentieth Century

This was the time of the “Theory of Degeneration” in Europe, with particularly Cesare Lombroso’s concept of “moral imbecility” to account for criminality.

The **Functional Psychoses** were classified by Emil Kraepelin (1856-1926). He was professor of psychiatry at the universities of Dorpat (then a province of Russia) and at Heidelberg and Munich in Germany. He described what we now know as Schizophrenia as Dementia Praecox. Eugen Bleuler (1857-1939), in 1911 wrote *Dementia Praecox or the Group of Schizophrenias*.

Shock Treatments: These were introduced using the drug Metrazol by the Hungarian Psychiatrist Ladislav Meduna (1896-1964). Insulin Treatment was introduced by the Viennese physician, Manfred Sakel (1900-1957). Lucio Bini (1908-1964). Electroconvulsive treatment (ECT) largely replaced metrazol and insulin in the treatment of schizophrenia in the 1940’s and early 1950’s.

Drug Treatment, Psychotherapy, Cognitive Behaviour Therapy

These are the common treatments of our time. You might ask where yoga fits into to all this. The psychologists have incorporated aspects of yoga and called them different names under the general banner of Cognitive Behaviour Therapy. Alternate Nostril Breathing, guided imagery, yoga nidra called relaxation practices are but an example. There is also Mindfulness Based Cognitive Behaviour Therapy, also from a professor of psychology. Psychologists because of their study of human behaviour, their experimentation, inability to prescribe drugs, have embraced the non Western Medical Model.

Psychotropic drugs started in all seriousness with the advent of chlorpromazine in 1952. Double blind tests were used to test its efficacy. Tricyclic antidepressants were introduced in 1957. Lithium carbonate for manic states was introduced by Australian Psychiatrist, John Cade (1912-1980), in 1949. He resided in Melbourne. Mogens Schou (1918-) validated Cade’s findings. It became available for use in America in 1970. Selective Serotonin Reuptake Inhibitors (SSRI’s) started in 1988. All drugs have their side effects, and patients are unwilling in many cases to tolerate these side effects if a safer non drug therapy can be used. Against this background the so called “Mind Body Therapies” have become popular. In the 1970’s, biofeedback techniques were used to test the electrophysiological concomitants of relaxation and meditative states. Transcendental Meditation Techniques and Autogenic Training Techniques

(Wolfgang Luthe) were in use at the time. Patients were given feedback on their degree of relaxation by the feedback from these machines. Yoga is a biofeedback technique where awareness of the breath, its depth, character and other features, feedback to the yoga practitioner (yogi or yogini), their existential presence at that moment which is observed mindfully, without judgement. It is this breath awareness within the asanas, and its relation to movement that heightens the efficacy of the asanas clinically by producing a moving meditation. This is taken even further in formal pranayama practices of controlled breathing. When one is attending to one's yoga practice with such mindful presence in the moment, then the worries of the world dissipate.

When yoga practices are taught, patients will use them in their own unique way. The first author has a Veterans Yoga group which meets weekly. It is run in a circle and along the format of group psychotherapy. Sharing is encouraged. It was during one of those sharing periods that one veteran shared that the counted outbreath with a breath hold at the end, as suggested to us for this group by Kausthub Desikachar, was being applied by the veteran in traffic when he had an attack of "road rage". Hence a new to Western Psychiatry technique for anger management was born. The veterans use this technique to good effect when they awake during the night disturbed with nightmares. Many combine it with a yoga nidra practice, and for those who practice regularly, there is no further complaint about insomnia. It may not go away, but "awake" time is much more peaceful, and after a period of time, using good mental hygiene before bed, insomnia and anxiety symptoms gradually fade into the background. Yoga is very effective for pain management. It sometimes is hard to convince a pain sufferer that breathing techniques will affect and improve beneficially the awareness and response to pain, and will help to overcome the complication of depression, of which pain is very often the antecedent.

Indian Practices

India has had its Traditional Indian Medicine called Ayurveda, in a similar way to Traditional Chinese Medicine. Yoga Therapy has played a large part in healing, because it is portable and cheap. It is also effective. In BKS Iyengar's family there is the living proof in himself and his daughter Geeta.

Summary

It appears that yoga is here to stay in Western Medicine as is Traditional Chinese Medicine (TCM) and acupuncture. Even with TCM, often it is not used, simply because its efficacy is not understood by patients and doctors. A recent example in one of our patients who was dehydrated following influenza, rehydration using intra venous therapy was not possible. Using Western Medicine, a surgical cutdown to a vein would have been the next step to access a larger vein which may not be collapsed. The patient begged to see the jointly qualified Western Medical and TCM doctor, and within a short time, due to acupuncture the channels which augment Chi (life force), the veins became very visible and strong, and then intravenous therapy by a Western doctor, working with a Chinese doctor, provided a more natural way of receiving fluids through the veins. Prana is the Indian equivalent to Chi of Chinese Medicine. There are yoga techniques and Âyurvedic techniques which work hand in hand. We have researched Yoga and Qi Gong (from TCM), and have found them

both to be effective. Qi Gong takes longer to achieve, and requires a higher dose (daily practice), but it works, and is more suitable for the less agile. Yoga and TCM encourage a daily practice, and what this achieves over Cognitive Behaviour Therapy is that the active practice continues indefinitely, and is always appropriate to the person on that day. It requires only a floor, preferably a mat, sometimes a chair and cushion, and can be practised anywhere. It is portable and cheap, and provides preventive intervention (prevents or limits relapses). What more could those designing the health budget ask for. It is our wish to introduce more of these practices into teaching those who care for the mentally ill who need personal empowerment, taking responsibility. Yoga and Medicine do not have to be separate. They can and do work together. More health practitioners need to be trained, and efforts are under way to achieve this.

¹ BKS Iyengar: *Yoga the Path to Holistic Health* Dorling Kindersley Limited 2001, pp 345-347
Depression sequences of asanas ISBN 0 7513 2167 2

² Kraftsow, Gary: *Yoga for Wellness, Healing with the Timeless Teachings of Viniyoga*, Penguin/Arkana, 1999, pp 318-323 ISBN 0 14 01.9569.6

³ Benson, Herbert: *The Relaxation Response*, Avon Printing, 1976

⁴ Dr Dean Ornish: *Program for Reversing Heart Disease*, Ballantine Books, New York, 1990 ISBN 0-345-37353-7 Library of Congress Catalog Card Number: 91-91878 www.lifestyleadvantage.org and www.Ornish.com.

⁵ Sadock, MD, Benjamin J. & Sadock, MD., Virginia, A. *Kaplan & Sadock's Comprehensive Textbook of Psychiatry*, Seventh Edition Volume Two, Lippincott Williams & Wilkins 2000 p. 3301

⁶ Galen: *On the Affected Parts*, trans. And ed. R. Siegel (Karger, Basel, 1976)

⁷ St Augustine trans EB Pusey: *Confessions of Saint Augustine*, Modern Library, New York 1949.

⁸ *A Treatise on the Canon of Medicine of Avicenna*, Gruner, London. 1930.