

THE PLACEBO EFFECT AND THE ALEXANDER TECHNIQUE: *a discussion paper*

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From its earliest days, medicine has been short of effective remedies for most of the ailments from which people suffer. Yet healers have never been out of fashion. Going to the doctor is something people in all societies have always done and still do.

The word placebo began to acquire its modern meaning in the 19th century when doctors applied it to medicines which they knew had no therapeutic ingredients. In pre-scientific times traditional remedies could be given the benefit of the doubt but with the advance of science doctors knew better. They gave these remedies which they believed to be therapeutically useless because their patients wanted something from them. These medicines were given to please the patient; hence came the name placebo which is Latin for *I will please*.

In modern medical language, the term placebo tends to be reserved for an inert substance which is used in drug trials. The subjects undergoing the trial do not know whether they are receiving the drug or the placebo thus, in theory, providing a means of measuring the effectiveness of the drug. But the placebo story is much more complicated. One commentator has written:

*Placebos are the ghosts that haunt our house of biomedical objectivity, the creatures that rise up from the dark and expose the paradoxes and fissures in our own self-created definitions of the real and active features in treatment.*¹

This paper looks at the complexities and paradoxes that begin to emerge once the placebo effect is examined in detail. It looks at the attitudes to it which range from the angrily dismissive to a grudging acceptance of its multifaceted reality and importance. It also endeavours to explain how it fits within the perspective of the Alexander Technique (AT) and the work carried out by AT teachers.

The placebo effect in practice

Before getting into a discussion of the placebo effect in practice, it is useful to define the terms “placebo” and “placebo effect” as they are used in the paper. A “placebo” is an inert substance, usually in the form of a pill, which has no active therapeutic ingredient. It usually consists of a small quantity of lactose, sugar, starch or some such neutral substance; it is a typical medicinal pill from which the active ingredients have been omitted. The “placebo effect” is the improvement that occurs in a patient when they receive such a pill or an equivalent treatment without any active therapeutic component.

The main use of placebos in modern medicine is in what is called a Randomised Placebo Controlled Trial – this is also known as a double blind trial. In one of these trials, a number of people, the larger the number the better, suffering from the problem the treatment is supposed to deal with – liver disease, high blood pressure, depression, back-ache, acne, not being able to stop smoking, or whatever - is selected. The trial subjects are divided into two evenly matched groups. One group gets the treatment, usually a drug, and the other gets a placebo. The researchers conducting

¹ Harrington (1999)p1

the trial take great care to ensure that neither the patients nor the those administering the drug know whether the drug or the placebo is being given. Hence the term “double blind”.

The symptoms of the ailment are measured in all the participants at the beginning of the trial. The treatment is given and the symptoms are measured again. There is often a follow-up some time later to see whether any effects have lasted. The effectiveness of the drug is measured against the effect of the placebo. Only if the drug produces a significantly better effect than a placebo will it be accepted as useful.

Placebos in the wider medical context

Despite the lack of therapeutic ingredients, which have led some commentators to refer to the placebo effect as “*imaginary*”, there is no doubt about its reality. Some degree of placebo effect or response almost always occurs when someone with an ailment receives treatment from a person they regard as having some kind of healing powers. That person may be a doctor or pharmacist, an alternative or complementary practitioner, a psychotherapist or psychologist, or someone who claims to have influence via prayer or other means on the workings of a spiritual or non-material world. The placebo effect is also found in the case of self-administered remedies or treatments provided the patient believes in their efficacy.

From the earliest times, the placebo effect has always, albeit unknowingly, been the bedrock on which medicine has rested. Until the invention of modern antibiotics in the 1930s, the medical cupboard was remarkably bare. Apart from bone-setting, lancing boils and a few surgical operations, there were very few effective remedies for most of the health problems that affected people. Well into the 1950s, many general practitioners used to make up their own bottles of medicine to give to their patients. They would use syrup or sugar and colouring with some added alcohol, chloroform or opium; indeed until quite recently many cough “remedies” contained a similar range of ingredients.

But the fact was that despite their lack of active therapeutic ingredients, patients generally found these medicines did them good. Their symptoms abated and they felt better and the doctors administering them knew from experience that this would happen. Not surprisingly, doctors themselves tended to be dismissive of such patient-pacifiers, commonly referring to a treatment which did not contain what they recognised as an active curative ingredient as “*a mere placebo*”. A pernicious effect of the knowing administration of what physicians considered to be useless remedies is that it tended to heighten the gulf between medical professionals, who were in the know, and patients who could be duped with placebos. But since there were few alternatives available, the mutually advantageous practice of prescribing what doctors believed to be fake medicines continued.

The fact that placebos were nevertheless often surprisingly effective in curing people who came to their physicians for treatment posed a problem. It became common to dismiss placebo cures as being somehow less than “*real*”. The expression “*It’s all the mind*” is still used to denigrate the placebo effect, the implication being that, in some sense, people are mistaken in thinking they feel better and that the placebo effect is really unreal.

W. Grant Thompson is Professor Emeritus of Medicine at Ottawa University and has been a general practitioner, gastroenterologist, medical researcher and medical educator. He brings a broad breadth of medical experience to the subject of the

placebo effect which he has been studying since 1970. He is in no doubt about the reality of the placebo effect and the dependence of a high proportion of medical practice upon it. He says:

By far the most common category of placebo use is the deployment of treatments that are erroneously believed to be effective by both healer and patient. This practice is as old as healing itself.²

This is certainly true of traditional remedies like crab's eyes, swallow's nests, cast-off snake skin, wood lice and powder made from precious stones which may have some traces of recognisable therapeutic agents but rarely if ever in quantities likely to be effective. The same is likely to be true of the use the ground up horn, bones and other body parts from tigers and rhinoceroses as remedies. The modern pharmacopeia is equally replete with "remedies" for which there is no therapeutic rationale.

Indeed, many of the common remedies in traditional medicine were worse than useless; they were unquestionably harmful. Bleeding, for example, was widely used for two thousand years but is now recognised to be a very bad idea; it has been said that excessive bleeding by his doctors caused the death of George Washington in 1799.³ Doctors also used blistering and purging and fed their patients medicines based on arsenic, mercury, sulphur and various other noxious substances. There is no way these would be administered as medicines nowadays. But for hundreds of years doctors and their patients were convinced they were useful.

A paper by Shapiro and Shapiro says of such treatments that during the centuries they were in vogue:

Patients continued to submit to purging, puking, poisoning, cutting, cupping, blistering, bleeding, freezing, heating, sweating, leeching and shocking. Despite the extensive use of these noxious methods and many other bizarre substances, physicians continued to be respected and honored because they were the therapeutic agents for the placebo effect.⁴

The authors go on to assert that until recently, the history of medical treatment is essentially the history of the placebo effect.⁵

Modern examples of the placebo effect

Daniel Moerman is an anthropologist who has been studying the placebo effect since the mid-1970s. His book *Meaning, medicine, and the placebo effect* is a literate, good-humoured and generally engaging book about the placebo effect and provides numerous examples of its strangeness.

One was a trial of a new stomach-ulcer drug called Prevacid in 1994. A total of 300 people participated in the trial. All were suffering from ulcers which had been physically identified by examination using an endoscope. The patients were divided into three groups. Some were given the new drug, Prevacid, some were given the old drug, Zantac, and some were given a placebo.

² Thompson (2005)p23

³ Moerman (2002)p11

⁴ Shapiro (1999)p15

⁵ Ibid.p13

The result of the trial was that 88 percent of the people who got the new drug were cured of their ulcer compared with 66 percent who had been given the old drug. This was rightly regarded as proof that the new drug was more effective than the old one. The result was written up in the scientific and medical literature and scientists produced explanations for how the improvements had been brought about. What interested Moerman was the fact that 44 percent, almost half of the people who got the placebo, were also cured of their ulcers. He says this was not mentioned in the scientific write-up.⁶ Medical scientists do not like the placebo effect.

Another study described by Moerman was in Italy in which groups of men and women were given different colours of placebos but were told they were sleeping pills. The researchers found that orange placebos had very little effect but that blue ones were effective. The problem was that the blue ones were much more effective in women than in men. Moerman suggests that one way of making sense of the results is that blue is the colour of the Madonna and is reassuring to women. But blue is also the colour of the national football team which is anything but consoling to men since they worry so much about it. As he says:

Since the Virgin is always thought of in blue, and since the mother of God is a very reassuring and protective figure for Italian women, it seems reasonable that blue sleeping tablets should be effective for them...Blue is the colour of the Azzuri, the national Italian soccer team. So it is at least plausible that blue sleeping tablets would work less well for men than for women. Orange, by contrast, is a color without strong meanings in Italian culture.⁷

Research has also found that it is important to stick to one's placebo medication. Trials of a heart drug showed that those who stuck to their prescribed medicine did better than those who did not. But. ...it made no difference whether the patients took the active drug or the placebo.⁸

Another example comes from some blood pressure drug trials in Australia which found that all groups, whether given placebos or drugs, showed reductions in blood pressure – including those who received no treatments but simply had their blood pressure measured. Having your blood pressure measured, in other words, has a placebo effect. But while that is true, it is also true that there are plenty of examples of people whose blood pressure goes up when they go to the doctor to get it measured. This is an example of the opposite to a placebo effect and is called a nocebo effect.

A common nocebo effect, which comes from reading medical textbooks, used to be confined mainly to medical students but the availability on the internet of detailed symptoms for most ailments has immeasurably extended the range of those at risk from it. Other examples of the nocebo effect are the various credible accounts of voodoo priests killing or sickening people by putting a curse on them. In parts of the world, the power of certain people, usually described as witches, to produce these effects is still believed in. Legislation against witchcraft was only repealed in Europe at the end of the 18th century and even today, apparently, exists in Saudi Arabia.

The above examples illustrate how people at the receiving end of the placebo or a nocebo are affected. But the attitude of the people on the delivery side, the doctors, is

⁶ Moerman (2002)p10

⁷ Ibid. p49

⁸ Spiro (1999)p42

also important. Moerman recounts the case of some drugs for angina pectoris – the heart problem which causes severe pain – that were commonly used in the 1940s and 1950s. These were generally agreed to be effective and doctors and patients were reasonably happy to continue using them.

But then some research studies showed that these drugs were no more effective than placebos. This caused doctors to lose confidence in them and the effectiveness of the drugs fell by half, down to 30-40 percent, which happened to be what the report of the trial described as the base-line placebo effectiveness. Although the difference in the therapeutic outcome was large, the only thing that had changed was that the doctors had become more sceptical about the efficacy of these drugs. The supreme oddity of these results is that the drugs had unwittingly always been placebos but even when this became known to the doctors administering them they still healed 30-40 percent of the angina patients. As Moerman puts it: “...in these grave conditions, skeptics can heal 30% to 40% of their patients with inert medication, while enthusiasts can heal 70% to 90%.”⁹

In an even more complex study done in France,¹⁰ some patients suffering from cancer pain were divided into two groups. The first group were subjected to a standard medical trial in which some were given a painkiller called naxopren and others a placebo. This trial uncontroversially showed that the painkiller worked better than the placebo. But then the researchers talked to the other group of patients about their part in the trial and explained that some would be getting painkillers and some would be getting placebos. The surprising thing is that both the naxopren and the placebo worked much better in this group. In fact, the placebo worked better in the informed patients than the naxopren did in the uninformed patients.

As Moerman puts it:

*In this case, a discussion about the fact of getting drugs, and even the possibility of getting an inert drug, increased the effectiveness of both the drug and the placebo. Knowing what's going on, experiencing treatment both physically and verbally, makes a difference.*¹¹

These examples show a pattern beginning to emerge. When a trusted doctor believes in the efficacy of the treatment, there will always be some degree of placebo effect, irrespective of whether the treatment has any therapeutic ingredients. If the doctor knows the treatment is a placebo but the patient believes it has curative properties, a placebo effect will also occur. The crucial factor is that the patients think they are getting something curative, even if they suspect it may be a placebo. There is no effect if someone slips a placebo pill into someone's food.

As Moerman puts it

*Placebo treatment can dramatically reduce pain compared to no treatment, but only if the subjects know it is happening. It is not the placebo itself that reduces the pain, which makes perfect sense since it is inert. It is the knowledge of the placebo that does the trick*¹²

⁹ Moerman (2002)p39

¹⁰ Ibid.71

¹¹ Ibid.72

¹² Ibid.106

Physically measurable placebo effects

In dealing with pain, nausea, anxiety and other feelings, it is always possible to dismiss the placebo effect on the grounds that it is “subjective” implying that this makes it unreal. This austere standard of reality would, of course, exclude the relief of pain, anxiety, and the many other subjective results which people experience after they visit their doctor or consume pharmaceutical remedies. It is, nevertheless, legitimate to ask whether, in addition to the many examples of subjective changes wrought by placebos there is any evidence that it can produce objectively measurable physiological changes..

This issues was addressed in Henry K. Beecher’s widely read paper, *The powerful placebo*, which was published in 1955. In this, he remarks:

*It is evident that placebos have a high degree of therapeutic effectiveness in treating subjective responses...This is shown in over 1000 patients in 15 studies covering a wide variety of areas: wound pain, the pain of angina pectoris, headache, nausea, phenomena related to cough and to drug-induced mood changes, anxiety and tension, and finally the common cold, a wide spread of human ailments where subjective factors enter.*¹³

But lest it be assumed that he was talking only of subjective responses he goes on to say:

*It must not be supposed that the action of placebos is limited to “psychological” responses. Many examples could be given of “physiological” change, objective change, produced by placebos.*¹⁴

He also refers to work by others in which

*...‘placebo effects’ include objective changes at the end organ which may exceed those attributable to potent pharmacologic action.*¹⁵

Beecher also quotes instances in which placebos not only produced such ‘objective changes’, but where their use evoked severe side-effects resembling the allergic reactions sometimes experienced by people taking powerful pharmaceutical products. He mentions the overwhelming weakness, palpitation and nausea occurring in one patient receiving a placebo treatment. He also mentions that

*A diffuse rash - itchy, erythematous, and maculapapular - developed in a second patient after the placebo. It was diagnosed by a skin consultant as dermatitis medicamentosa *. The rash cleared quickly after the placebo administration was stopped.*¹⁶

* medicamentosa means caused by medicine

In addition to the above examples given by Beecher, the scientific literature lists a variety of cases in which physically measurable changes have occurred in patients receiving placebos. Thompson, for example, refers to a study of placebo responses to ulcerative colitis in which improvements in the appearance and histology of the colon

¹³ Beecher (1955) p1606

¹⁴ Ibid.p1602

¹⁵ Ibid.p1606

¹⁶ Ibid.p1603

occurred.¹⁷ Clinical trials of an ulcer drug in the 1970s showed that the ulcer crater healed in a third of the patients receiving the placebo.¹⁸

In summary, the majority of clinical trials of conventional or unconventional medical treatments, for a wide range of debilitating conditions, show some degree of clinically-observable placebo effect; and in some cases the placebo effect is as great as or greater than that provided by the treatment on trial – this is otherwise known as a failed clinical trial of the treatment.

Because of the degree of variation in its occurrence, the placebo effect is impossible to predict in detail. All that can be said is that it is typically in the range 20-60 percent¹⁹ and can go up 80 percent²⁰ or even higher. The high figure is startling; if any treatment, whether conventional or complementary can claim a positive response from 80 percent of the people receiving it this will generally be seen as proof of its efficacy. While the expression “*It’s no better than a placebo,*” might be commonly interpreted as saying that it is useless, this is not necessarily the case.

At the same time, the placebo effect should not be exaggerated. There are no reliable reports of placebo cures of broken limbs or major diseases such as pancreatic or liver cancers. For all its power and oddities, the placebo effect does not deal in miracles.

Efforts to eliminate the placebo effect

It is easy to see why drug companies and medical researchers dislike the placebo effect. It prevents them getting a firm grasp on what is happening when drugs and remedies are being subjected to clinical trials. If, for example, 80 percent of people experience a reduction in pain with a placebo, it becomes more difficult to prove it is worthwhile taking an expensive painkiller. This is also why there is widespread hostility to any discussion of the placebo effect among practitioners of alternative and complementary medicine. No one dispensing conventional or unconventional remedies to paying clients wants to be told they are purveyors of the placebo effect.

Various attempts have been made to eliminate the placebo effect from clinical trials so that researchers can assess what they feel to be the “real” effect of drugs and other treatments. One such approach is based on the belief that some types of people are more susceptible to the placebo effect than others. These are called ‘placebo responders’ and various efforts have been made to devise ways of identifying them so they can be excluded from trials of new drugs and remedies. Beecher was in favour of this approach and remarks that

...as a consequence of the use of placebos, those who react to them in a positive way can be screened out to advantage under some circumstances and the focus sharpened on drug effects.²¹

The question was how to identify the placebo responders so they could be screened out. It was initially thought that they might be more open to suggestion, less intelligent, more imaginative, less stable or whatever, and researchers tried to develop personality and psychological tests to identify them. But the results were so

¹⁷ Thompson (2005)p199

¹⁸ Spiro (1999)p41

¹⁹ Shapiro (1999)p21

²⁰ Thompson (2005)p193

²¹ Beecher (1955)1602

inconsistent that researchers have more or less given up on that approach. Thompson says:

*No consistent image of the placebo responder emerges from these and other studies. Nevertheless, the data contradicted the popular view that educated, intelligent, imaginative and self-reliant people are immune to placebo effects...the most likely explanation for the unpredictability of placebo effects is that we are all potential placebo responders and that our changing circumstances determine when we are individually susceptible.*²²

Another approach to countering the placebo effect was to start a clinical trial with what is known as a “placebo washout” stage. In this approach, everyone is put on a course of placebos when the trial is started. All those who respond to the placebos can then be eliminated and the trial proper can begin, but again the researchers kept encountering problems.

Moerman recounts a study of a blood-pressure reducing drug in which after a four-week washout stage, the researchers found that almost one third of participants had improved so much that their blood pressure had dropped below the threshold for entry into the trial.²³ To add to the researchers’ difficulties, once the trial began, they found that some of those who had passed through the wash-out stage as non-responders turned into responders.²⁴

It is now widely accepted that it is impossible to predict how many people in any particular group are going to respond to a placebo. In a 1991 paper, R. J. Bulger remarked that most studies show that the placebo effect occurs in 30 to 40 percent of patients.²⁵ In the view of Morris, the uncertainty is considerably greater and he remarks:

*Contrary to the widespread myth that one-third of all patients are placebo-responders, the effectiveness of placebos ranges anywhere between 1 percent and 100 percent, depending on the conditions of the trial.*²⁶

There is no sign that the methodological problems, and the additional expense, of having clinical trials cluttered up by large numbers of placebo responders are soon going to disappear. In general, the attitude of medical researchers involved in clinical trials is to ignore the placebo effect and the questions it raises.

Making medical sense of the placebo effect

The placebo effect, nevertheless, continues to occupy the minds of some medical thinkers. It is, after all, rather odd, to say the least, to invest millions in the development of a drug as a result of a trial which showed that it was no better than a sugar pill for 30-40 percent of patients receiving it. The financial reasons for a major pharmaceutical company doing so may be obvious but the question of how to make medical sense of the results remains.

²² Thompson (2005) p198

²³ Moerman (2002)p p34

²⁴ Thompson (2005) p201

²⁵ Bulger (1991)p285

²⁶ Morris (1999)p188

Thompson has proposed a useful conceptual model for thinking about the total response to a healing intervention and the place of the placebo effect within it. In this model, the overall therapeutic result of any treatment can be subdivided into three components shown in the equation below:

THERAPEUTIC RESULT = PLACEBO EFFECT + TREATMENT IMPACT + NATURAL PROGRESS

The **THERAPEUTIC RESULT** is measured by the extent to which there is an improvement in the condition of a group of people undergoing a particular treatment. This may be a physically quantifiable improvement such as a reduction in the size of a stomach ulcer or a lowering of blood pressure, or a more subjective effects such as a reduction in pain or anxiety, feeling less depressed, sleeping better or some other indicator.

The **PLACEBO EFFECT** is the improvement experienced as a result of the placebo effect. The available evidence is that anyone receiving treatment from a person they regard as having some kind of healing power will show some degree of improvement irrespective of whether the treatment has any actively therapeutic component. The same is true of self-administered remedies in which the patient has confidence. The extent to which the placebo effect contributes to the overall therapeutic result in any particular case is generally not identifiable outside formal double-blind clinical trials in which careful procedures are adopted to measure it.

The **TREATMENT IMPACT** is the measured effect of the treatment, which may be a drug such as a painkiller or sleeping tablet; an antibiotic or blood-pressure reduction medication; having an operation; doing exercises; taking homeopathic preparations; going to an acupuncturist; or whatever is the chosen method of treatment. In everyday life, as opposed to clinical drug trials, the treatment impact includes the placebo effect; it is the result that healers and patients normally attribute to the treatment.

The **NATURAL PROGRESS**, often referred to as the “natural history” of the ailment, is the change that occurs in the ailment if nothing is done about it. A cold, for example, normally goes away of its own accord in about ten days. Small wounds, bruises and muscular aches usually heal themselves.

Ailments like headaches, insomnia, high blood pressure, arthritic pains, and digestive problems tend to vary in severity over time and according to a person’s mental and physical state. Diseases like multiple sclerosis have periods of remission. Even fatal diseases, like pancreatic or stomach cancers, in which the natural progress is an increasing severity of effects and eventual death, rarely progress at a uniform rate.

The result is that if treatment of any kind is administered for a normally self-healing ailment, such as a common cold, an improvement is more or less guaranteed. In the case of a more severe or a terminal illness, if a treatment coincides with one of the times when the natural progress is going through a slow phase, the treatment will appear more effective at bringing some relief than if the disease is going through a rapid phase.

In any given case, apart from formal clinical trials, no one knows the balance between the above three elements in the overall therapeutic result. It varies between ailments, patients, the therapeutic environment and those who are administering the treatment. It can also vary over time in individual cases, with people being more or less susceptible to the different elements at different times.

Though it sheds little, if any, light on the vagaries of the placebo effect and lacks predictive power, such a conceptual model of the treatment nevertheless looks broadly reasonable and appears to provide a useful way of thinking about human ailments and their treatment. It nevertheless conceals a fundamental flaw in common thinking, both lay and professional, about ailments and their treatment. It is based on the proposition that it is the things that are done to patients by doctors and healers that cure them. The focus is on what the doctor or healer does; it is iatrogenic.

The self-healing processes of the body

The iatrogenic model omits the role of the body itself in the healing process. Yet it is the body itself which plays the major part in whatever healing processes are taking place. The body is a homeostatic self-repairing and self-renewing entity. Waking or sleeping, it is perpetually engaged in repairing and replacing its blood, bones, nerves, skin and all the rest of itself. It also has a powerful and comprehensive immune system which is constantly detecting and dealing with external and internal threats to its functioning.

The body is complex beyond imagining. It has about 100 trillion cells classified into about 200 different types all fulfilling different functions.²⁷ The combined process by which the body retains its identity and stability is known as homeostasis – meaning remaining the same. Although the exact details of how the homeostatic process works in any particular instance may be rather mysterious, there is no mystery about it in principle. It is, in fact, almost tautological.

Stable biological systems cannot survive unless, from their very earliest stage, they possess the self-correcting and self-repairing mechanisms required to keep them functioning within their own safe limits. The result is that when anything internal or external begins to threaten the functioning equilibrium of the body, a vast range of compensating or corrective responses are ready to come into action. The practical point in the present context is that when the body's normal functioning is impaired by injury or disease, it is the body itself that does the repair work, the actual healing.

Doctors and therapists, as well as the medicines and treatments they provide, facilitate the natural healing systems of the body. If someone breaks a leg, it is certainly a major help if it a doctor resets back into its proper shape but it is the body itself that produces the cells to knit the break together. If someone has a bacterial infection and takes an antibiotic, the hope is that it will kill off or weaken the invading bacteria but it is the body's own defence and repair mechanisms that do the post-war clean-up. If a cancer patient has a tumour removed by a surgeon, or has chemotherapy, it is their body's own repair mechanisms which do the actual healing of all the damaged tissues. Whatever the ailment and whatever the treatment, unless the body's own natural repair systems are in good working order, recovery will not take place. The common expression when this occurs is that they are "*beyond medical care*" – more correctly, their capacity for self-repair has been exceeded – and they die.

The placebo effect re-examined

Once the placebo effect is seen as a manifestation of the homeostatic or self-healing processes of the body, rather than the mysterious and capricious result of taking inert medicines, much of the mystery surrounding it tends to melt away and it becomes far

²⁷ Tortora (2000) p96

more open to rational discussion and analysis. Researchers in charge of clinical drug trials may prefer to ignore the placebo effect, still seeing it as a troublesome interference with their work rather than a fruitful field of enquiry. Nor is this likely to change in the near future; enhancing the placebo effect is likely to take second place to the search for the new miracle drug. But there is nevertheless a great deal of clinical information about the placebo effect available from its largely unanalysed role in the many clinical trials in which it has featured. Medical history also provides copious records of healing results obtained through the more or less universal use of placebos and even nocebos.

Drawing on these results and experience, much is already known or can be inferred about what influences the magnitude of the placebo effect. Thompson points out that a patient's expectations are important. If people receiving placebo treatments expect to get better, they tend to do so more than those who feel pessimistic about their chances; but this only applies as long as they are not too optimistic. He also mentions that the doctor's demeanour, attitude, and behaviour are important in promoting healing in people who are receiving placebos adding that "*symbols of the doctor's accomplishments and healing power can also contribute*". He adds that

*Satisfaction is greatest if the doctor examines the patient, provides the relevant information and listens carefully.*²⁸

The various strange placebo effects mentioned earlier are more or less inexplicable if they are seen as treatments. How can an inert pill be more effective than a powerful drug? How can giving people an emetic and telling them it is a cure for nausea stop them feeling nauseous? But these puzzles come from the view that it is only what external therapeutic agents do to people that affects their healing. If the role of the healer is to help create the conditions in which the natural healing systems of the body are enhanced, it becomes possible to discuss how to go about this in the most effective manner.

Moerman puts it more formally and proposes the theory that the meaning attributed to medical activities and interventions has a major bearing on how they affect people. In other words, if what is being done to a person makes sense within their own framework of understanding, then the natural healing mechanisms of the body tend to work more effectively. In this view, displaying confidence and cheerfulness, paying attention to the patient and conveying a sense to them that they are in good hands are all likely to contribute to the natural healing process. Few patients feel better after an unpleasant interview with a grumpy distracted physician. The more scientifically astute know that this is because the experience, instead of delivering a boost their natural healing systems, has actually interfered with their working.

Although there is obviously much to be learned about the physiology of how and why placebos act in the way they do, there is no doubt about the importance and relevance of the placebo effect to the healing process. The increasing number of scientific papers devoted to it suggests that it is beginning to receive the attention it deserves from medical researchers. Sufficient is already known, however, to turn now to look at how it fits within the theory and practice of the AT.

²⁸ Thompson (2005)p199

Relevance of the placebo effect to the AT

Although trainee Alexander teachers are constantly warned that they must avoid getting drawn into medical diagnosis and treatment this is not the same as saying having an AT lesson provides no therapeutic input to the pupil. Having an AT lesson creates the classic environment for mobilising the self-healing systems of the body – or maximising the placebo effect

When a person is having an AT lesson they are being trained to use their neuromuscular systems in a freer and less damaging manner. Afterwards, they tend to reduce the amount of habitual tension they inflict on themselves so that there is less friction in their joints. Their breathing and circulation are improved. The mechanisms and organs of the body are enabled to function in a more efficient way. With the improved breathing that comes from a more freely-moving rib-cage, there may be a beneficial adjustment in the alkalinity of the blood which affects the autonomic system.²⁹ When an AT teacher gives a lesson they are doing what the well-known AT teacher, Walter Carrington, described as creating the conditions in which the autonomic system can do its job properly – in the present context this might be rephrased as creating conditions which facilitate the natural healing systems of the body.

The improvements in the physical working of the body also account for the fact that when someone who is well has an AT lesson, they generally feel better. This is because almost everyone can benefit from less muscular tension, better breathing, improved balance and so forth. It is why musicians, actors, athletes, Alexander teachers and others, many of whom would be regarded as being in very good health, usually feel better when they have had an AT lesson.

The relevance of the AT is also evident when considering the natural progression of a disease. Persuading ill people to lie down, to release tensions, to adopt better breathing habits, to begin to get rid themselves of their damaging habits of using themselves, are all likely to contribute to the self-healing mechanisms of the body and lead to faster and fuller recovery. Even in very severe or fatal illnesses, these benefits of AT lessons can enhance the experience of remission and provide some ease even as the natural progression continues; the AT fits perfectly within the framework of the increasingly valued and respected disciplines of palliative care.

To all this can be added the fact that it is impossible to give a proper AT lesson without meeting the requirements that Thompson identifies as being important in maximising the placebo effect. AT teachers know they must listen to what their pupils tell them. They have the additional advantage that they are also able to “listen” with their hands to the subtle cues and messages coming from their pupil’s body. It scarcely needs saying that they are aware of the benefits of being cheerful, confident and reassuring.

Conclusion

From what has been said so far, it is evident that reflecting on the placebo effect as an aspect of the natural healing systems of the body is a valuable exercise for AT teachers and, indeed, everyone concerned with health and well-being.

²⁹ Lum (1981)

In the introduction to the proceedings of the symposium on the placebo effect Harrington says:

*Whatever additional role placebos play in the worlds of medical science, they certainly function as a powerful reminder to thoughtful scholars and researchers that our minds, brains, and bodies navigate a far more seamless reality than we, in our insular academic departments, know how to study.*³⁰

The placebo effect is only mysterious or contradictory if people choose to see it that way. For AT teachers it poses no threat or problem. David Moerman finishes his book by saying

*...when I have a headache, or some aches and pains in my back or leg, I shake two ibuprofen tablets into my hand, I look at them carefully and I say "Guys, you are best, the most powerful and trouble-free drugs in the world." Or something like that. Then, with a large glass of water ("Water is good too," I think carefully to myself), down the hatch.*³¹

Instead, he might more usefully have said:

"Whether I feel tired, sick and aching or on top of the world, I ring up my AT teacher and book a lesson. I know it will do me good."

For AT teachers, the placebo effect is an ally to be welcomed, understood and cultivated.

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³⁰ Harrington (1999)p8

³¹ Moerman (2002)p155