

No 5a THE PLACEBO EFFECT (II)

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1. Last time I was talking about the placebo effect, the curative effect of medicines or treatments that have no known curative ingredients or elements. I gave you various examples of the placebo effect in action.
2. We saw people getting better from illnesses as a result of taking completely inert pills. We saw that the placebo effect varying depending on the colour of the inert pills or the degree to which people are conscientious in taking them.
3. We saw instances of drugs being effective as long as doctors believed in them and losing their effectiveness when trials showed they did not have the curative effects doctors thought they had.
4. We saw how completely useless and even harmful treatments such as bleeding produced medical benefits as long as doctors, healers and their patients believed in them.
5. So the placebo effect is clearly real and powerful and is attracting a lot more scientific attention in recent times. Today I am going to try to make some sense of what is known about it and how it fits with the work we do.
6. So first a few summary facts. The proportion of people responding to placebos in scientific trials varies enormously. It is typically in the range 20-60 percent¹ and can go up 80 percent² or even higher. If a treatment, whether conventional or complementary gets a positive response from 80 percent of the people receiving it, most people would see that as pretty satisfactory.
7. A question last time was about the extent to which the placebo effect produces cures of major diseases with measurable organic effects. I have read of reports of quite startling results in the case where stomach ulcers have disappeared after placebo treatment but I have not seen any reports of placebo cures of major diseases like pancreatic or liver cancer.
8. What we can say is that when there have been of properly conducted trials of conventional or unconventional medical treatments, for a wide range of debilitating conditions, there is virtually always some degree of placebo effect. And in some

¹ Shapiro (1999)p21

² Thompson (2005)p193

cases the placebo effect is as great as or greater than that provided by the treatment.

9. We can also see why the placebo effect is still viewed pretty negatively by medical people and the general public. It feels somehow imaginary and in most people's view if you say of some medical intervention "*It's no better than a placebo,*" you have effectively said it is useless.
10. In fact, doctors, medical scientists and complementary health practitioners tend not to like talking about the placebo effect. It is unpredictable, hard to explain and it makes them nervous. If your clients are paying you, you do not want anyone telling them that most of the benefits they experience are the placebo effect.
11. That is why there have been various attempts to find a way of eliminating the placebo effect from treatment trials so that researchers can assess what they feel to be the "real" effect of drugs and other treatments.
12. One of these approaches is based on the belief 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.
13. It was thought, for example, that placebo responders 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 inconsistent that researchers have more or less given up on that approach.
14. 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.*³
15. Another approach to countering the placebo effect is to start a treatment trial with what is known as a "*placebo washout*" stage.

³ Ibid. p198

When you start the trial you put everyone on a course of placebos. All those who respond to the placebos can then be eliminated and the trial proper can begin.

16. Moerman refers to studies where they tried this in trials on blood pressure drugs. Obviously, there is a certain threshold level of blood pressure you must have in order to be selected for a trial of a blood-pressure reducing drug.
17. But the researchers kept running into problems. In one trial they found that after four weeks of placebo treatment almost a third of the people had improved so much that they had dropped below the entry requirement.⁴ To add to the researchers' problems, once the trial began, they found that some of the placebo non-responders turned into responders.⁵
18. It is now widely accepted that it is impossible to know how many people in any particular group are going to respond to a placebo. One of the contributors to the Harrington book says:

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.⁶

19. So how do we begin to make sense of all this? Thompson proposes a generalised model for all kinds of therapeutic interventions on the following lines:

THERAPEUTIC RESULT = PLACEBO EFFECT + TREATMENT IMPACT + NATURAL PROGRESSION

20. The **THERAPEUTIC RESULT** is the extent to which there has been a measurable improvement in the group of people undergoing a particular treatment. This may be a physical improvement such as a reduction in the size of a stomach ulcer, a lowering of blood pressure, a reduction in pain, feeling less depressed or some other indicator.
21. On the right hand side we have the three main elements responsible for whatever improvement has taken place.
22. The **PLACEBO EFFECT** is the improvement experienced by those receiving the placebo or the non-active element in the treatment. It will apply to everyone taking part in the trial and it may be very slight or it may be complete recovery.

⁴ Moerman (2002)p p34

⁵ Thompson (2005) p201

⁶ Harrington (1997)p188

23. The **TREATMENT IMPACT** is the direct effect of the drug or treatment. This could be the direct result of taking a drug such as a painkiller, an antibiotic, a blood-pressure reduction medication; having an operation; doing exercises; taking homeopathic preparations; going to an acupuncturist; or whatever we choose. Though this includes the placebo effect, it is the result we normally attribute to the treatment.
24. The **NATURAL PROGRESSION** is the change that occurs in any ailment if nothing is done. A cold, for example, normally goes away of its own accord in about ten days. Small wounds, bruises and muscular aches usually heal themselves.
25. Ailments like headaches, insomnia, high blood pressure, arthritic pains, digestive problems tend to vary in severity over time and according to our mental and physical state. Diseases like multiple sclerosis have periods of remission.
26. Even fatal diseases, like pancreatic or stomach cancers, in which the natural progression is an increasing severity of effects and eventual death, rarely do so at a uniform rate. There tend to be periods of remission and acceleration.
27. This means that if you take a cold or flu remedy for a few days you will usually see an improvement. In the case of a much more severe or a terminal illness, if a treatment coincides with one of the times when the natural progress of the disease is going through a slow phase, the treatment will appear more effective than if the disease is going through a rapid phase.
28. In any given case, apart from formal trials, we do not know the balance between these three elements. They vary between ailments and patients and those who are administering the treatment. They also vary over time in individual cases ,with people being more or less susceptible to the different elements at different times.
29. Bearing that in mind, such a model looks broadly reasonable. But I believe it has a major flaw which is at the root of our problems with the placebo effect. It is also at the root of a great deal of what is wrong with our health care system whether conventional or complementary.
30. This is because it is entirely treatment-centred. It is based on the proposition that it is the things that are done to us when we are ill that make us better. It puts the focus on what the doctor or healer does to us; it is iatrogenic if you want a word for it.

31. It omits the fact that the body itself, our own psychophysical organism, is a self-repairing and self-renewing organism. The body is always engaged in repairing and replacing its blood, bones, nerves, skin and all the rest of itself.
32. The body has about 100 trillion cells classified into about 200 different types.⁷ As these cells become damaged or diseased, they are replaced by cell division. As Tortora says:
*Somatic cell division replaces dead or injured cells and adds new ones for tissue growth.*⁸
33. When something is damaged, it is the body that does the repair work, the actual healing.
34. Doctors and therapists as well as the medicines and treatments they give us facilitate the natural healing systems of the body. If I break a leg, it is certainly a big help if a doctor sets it for me but is the body itself that produces the cells to knit the break together.
35. If I have a bacterial infection and I take an antibiotic, I hope 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 I have a tumour removed by a surgeon, or have chemotherapy, it is my body's own repair mechanisms which do the actual healing of all the damaged tissues.
36. Whatever the ailment and whatever the treatment, unless the body's own natural repair systems are in good working order, we will not get better. If the repair systems are not able to kick in, we are "*beyond medical care*" and we die.
37. Once we begin to look at it this way, the mystery of the placebo effect begins to melt away. Rather than being the capricious result of taking inert medicines, we can begin to see it is the normal action of our own healing systems.
38. The effectiveness of these healing systems varies depending on a wide variety of factors. These include our own physical and mental state, our age, the type of ailment we are suffering from and the extent to which our psychophysical needs are looked after.
39. So now let us look again at our diagram. We do not have trials of natural healing systems in which people go to hospital

⁷ Tortora (2000) p96

⁸ Ibid. p91

and are put into the natural healing ward where nothing is done to them.

40. But we do have the next best thing. We have lots of results from trials where people have been given placebos. Sometimes these are formal trials but we have seen that a high proportion of the history of medicine can be seen as the history of the placebo effect – the healing effects of inert or even harmful remedies. So we have the results of that experience to draw on too.
41. Drawing on these results and experience, we know a lot about what affects the natural healing systems
42. Researchers have found that if people receiving placebos or useless 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.
43. It has also been shown that the doctor's demeanour, attitude, and behaviour are important in promoting healing in people who are receiving placebos. One of the most important things is that the doctor should listen carefully to what the patient has to say.⁹
44. The various strange placebo effects we have been discussing leave us with puzzles and contradictions if we see them 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 nausea?
45. These puzzles come from the view that it is only what external healing agents do to people that affects their healing. But if the role of the healer is to create the conditions in which the natural healing effects are maximised, the mystery becomes less.
46. Moerman proposes the theory that the meaning we attribute to medical things has a major bearing on how they affect us. In other words, if what is being done to me, makes sense within my own framework of understanding, then the natural healing mechanisms of the body tend to work more effectively.
47. These are important points for anyone involved in caring for people. Displaying confidence, cheerfulness, paying attention, being credible within the patient's reference framework all improve the natural healing process.
48. The next element on our diagram is the **Treatment Impact**. We as AT teachers are rightly wary of getting too involved in this area. We do not have any significant medical expertise and we

⁹ Thompson (2005)p199

must always avoid getting drawn into medical diagnosis and treatment. When we have any doubt, we advise our pupils to check with their doctor.

49. But the fact that we do not regard the AT as a medical treatment is not the same as saying having an AT lesson does nothing for you. AT lessons are not placebos. They have very definite effects.
50. When a person has a good AT lesson they use themselves better. There is less friction in their joints. Their breathing and circulation are improved. The mechanisms of the body are enabled to function in a freer and more efficient way. With improved breathing there may be a beneficial adjustment in the alkalinity of the blood which affects the autonomic system.¹⁰
51. When we give an AT lesson we are doing what Walter Carrington described as creating the conditions in which the autonomic system can do its job properly – in the present context we might say we are creating conditions which facilitate the natural healing systems of the body.
52. This also accounts for the fact that if you are well and you have an AT lesson, you generally feel better. We can all benefit from less muscular tension, better breathing, improved balance and so forth. This is why musicians, actors, athletes, Alexander teachers and others, many of whom we would regard as being in very good health, usually feel better when they have had an Alexander lesson.
53. We can also think about the relevance of the AT to the **natural progression** of a disease. Getting people to lie down, to stop, to release, bring them the benefits of better breathing reduced muscular tension, and all that flows from this. Even in very severe or fatal illnesses, these can enhance the experience of remission and provide some ease even as the illness proceeds on its way.
54. But we also need to keep things in a proper perspective. In talking of the placebo effect and the natural healing processes of the body, I do not doubt for a moment the advances that medical science has made. Nor if I had something seriously wrong with me would I deny myself the enormous benefits that the doctors and technicians of the National Health Service bring us.

¹⁰ Lum (1981)

55. But I do think that reflecting on the placebo effect, in the sense I am talking about, is a useful exercise for all of us. In her book, 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.¹¹

56. For our part, as AT teachers, there is no problem. The placebo effect is an aspect of the self-healing processes of the psychophysical organism we call the self. It is not all-powerful but it is only mysterious or contradictory when we choose to make it so. We should see it as an ally not a threat.

57. 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.¹²

58. I think, instead, he should say “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.”

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¹¹ Harrington (1997)p8

¹² Moerman (2002)p155