

Chapter 6

Belief Systems

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Suggested structure for the chapter:

- 1 Introduction
 - a. Patient's beliefs
 - b. Doctor's beliefs (medicine and society)
 - c. Placebos
- 2 The placebo effect –
 - a. What is it – some history
 - b. How do they work?
 - c. Some types of placebo interventions (7 in all)
- 3 Patient's belief systems
 - a. Belief, faith and conditioning
 - b. How these beliefs come about
 - c. How they may be changed
- 4 The medical belief system
 - a. Is there a placebo response?
 - b. Different results in different types of studies
- 5 The doctor-patient relationship
 - a. Doctor as teacher rather than healer
- 6 Utilising the placebo effect to make a positive contribution to health care
- 7 Conclusions and final thoughts

Introduction

The area of health beliefs presents us with some of the most challenging problems in medical care. As a GP I have experienced on many occasions the mother bringing her sick child into the surgery. After taking a history and examination the most likely diagnosis is one of the self-limiting viral infections which everyone has quite frequently, and which the majority of people overcome through their own immune responses. However reassurance is insufficient for many parents who demand an “antibiotic” which they believe is necessary to effect a cure. Many doctors give into this belief and provide the antibiotic which they believe will do no good (and in the long run may well do harm) as they are unable to change the patient's beliefs and dare not refuse or offer a placebo for fear of being found out and thus losing the essential trust which lies at the heart of medical practice.

Much has been written about the placebo effect, but is it worth summarising the situation as it plays an important part in the “ritual of the medical encounter” (this isn't a quote – I said it, but assume I got it from elsewhere – Mike). At the heart of the placebo response lies the belief systems of both the patient and the doctor.

The placebo effect has been long recognised, but little researched. It has been suggested that it is one of the most powerful healing agents known to medicine – yet it is abused, misunderstood and largely ignored. What other effective, and largely side-effect free medication can we use – it is cheap, and obviously effective.

Placebo – Latin – I will please. One of the main effects is to utilize the doctor’s “bedside” manner to gain the trust and confidence of the patient, so that whatever treatment they institute the patient will also trigger their own self-healing process. In most research projects researchers expect a positive response to a placebo in around 35% of cases (note that this percentage was first postulated by Henry Beecher in (52yrs ago), but it seems to be born out by drug trials). This percentage can rise dramatically for symptom relief where the three constituent elements of the placebo effect all combine. Thus when the patient believes the therapy will work, their support network of friends and family believe it will work, and their doctor also firmly believes it will work, (and communicates this to the patient) then this percentage is likely to double.

As doctors we don’t like the notion of suggestibility, with its psychosomatic overtones, and prefer instead to hide behind the physical model of ill-health in which our tools are pharmacological or interventionist.

The placebo effect has three main components –

- 1 The belief system of the patient
- 2 The belief system of the medical worker
- 3 The context in which it is used
- 4 The use of an intervention activity

Some doctors doubt whether there is a fact a placebo response. Two Danish doctors (in 11.15) reviewed the placebo effect by reviewing data from 114 trials in which patients were randomized to placebo or no treatment. They did not find that overall the placebos worked, although if only studies with subjective outcomes (like pain) were included then there was a benefit. We would expect this – of itself a placebo doesn’t raise a low Hb, however if it makes the patient feel better then they are likely to make adaptations that make them feel better even if the Hb stays the same.

A psychiatrist Walter Brown, has found that those who suffer from short term depression respond well to placebo – around 50%, whereas those who suffer long term depression do not. (? Ref but quoted in 11.13 the Newsweek article).

Patient belief system

Experience – belief - conditioning

Put here my stuff on belief – faith – conditioning model

How do patient’s build up, maintain and change their belief system –

- 1 Conditioning from their upbringing
- 2 Personal health experiences re-enforcing or challenging beliefs
- 3 Health experiences of those close to them
- 4 Attitudes of society – media, TV, stories they hear and beliefs of others
- 5 Medical beliefs in the doctors they trust

Doctor belief system

“Medicine in meeting the needs of both patients and doctors assumes a mantle of wisdom, authority and power. As Richard Asher pointed out “If you can believe fervently in your treatment, even though controlled studies show that it is quite useless, then your results are much better, your patients are much better, and your income is much better as well”¹ The reality is that all treatments alleviate symptoms, and some effect diseases. The vast majority of those who use alternative therapies are not quacks or charlatans, they are believers. They have experienced the good result of their efforts. It is characteristic of medicine to lay great emphasis on experience, yet un-audited experience may do little more than lead to making the same mistakes with increasing confidence, Critical thinking reduces the possibility of iatrogenic harm, but doubt diminishes the doctor as healer. Who can have faith in those who have no faith in themselves?²

Questionnaire survey by Nitzan and Lichtenberg showed that many physicians use placebos, and find them effective.

Placebo intervention activities

These can take many forms, but could be categorised as follows –

- 1 Pharmaceutical inert substance
- 2 Pharmaceutically active substance but with no effect on disease process
- 3 Pharmaceutically active substance used in sub-optimal dosage
- 4 Surgical intervention
- 5 Physical manipulation
- 6 Patient activity
- 7 Reassurance and positive attitude

These seven types of placebo intervention

1 Pharmaceutically inert substances

All classical drug studies have included at some stage a comparison between the new active agent and an inert “look-alike” substitute which neither patient nor doctor can distinguish from the “real” drug. The essential element in this research activity is the belief of both the doctor and the patient that the inert substance is in fact the active substance, so the drug's effect, and its side-effects, can be experienced by users of the inert substance. Classically the placebo is effective in around 40% of users. Has the more recent patient informed consent led to a diminution of the effect of both placebo and active ingredient as patient's must have some doubts cast into their minds as they consent to taking either an active or an inert substance?

2 Active agents with no effect on disease process

Many physicians have resorted to giving a fairly harmless agent, such as vitamins, which they realise cannot effect the disease process being treated, but when combined with a positive reassurance (Type 7 placebo activity), can have a positive placebo effect.

3 Sub-optimal dose of active drug

In the treatment of several conditions in General Practice a sub-optimal dosage may be used, yet still with effect. It has been suggested that the treatment of depression in General Practice is an instance of this as many patients are on what psychiatrists would consider is a sub-effective dosage, but combined again with a type 7 placebo reassurance may be effective.

4 Surgical intervention

It has been suggested that the placebo surgical intervention can produce the highest placebo response – up to 70% effective.

5 Physical manipulation

The activity of massage has been recognised as being beneficial, and along with many other caring actions may be responsible for developing a positive mental attitude in the patient which promotes healing.

6 Patient activity

When the patient is encouraged to undertake an activity which is suggested can be beneficial there can be a strong beneficial effect. The patient will probably feel better because they are themselves involved in improving their health. Following dietary advice, taking exercise, temporary removal from a stressful situation, can all be examples of patient activity which leads to a positive attitude in the patient

7 Reassurance and positive attitude

The successful physician healer will be able to use all of the above types (with the possible exception of type 4 – the surgical intervention) to promote healing and well-being in the patient which is acknowledged has a beneficial effect on the healing process. From the time of Michael Balint onwards this has been recognised, but never formalised, taught and practiced in a formal way.

Perhaps in these days of evidence-based approaches we should re-examine this most effective remedy, and make full use of it to benefit our patients.

How does the placebo effect work?

The placebo probably works in several different ways, the importance of which will vary from one patient to another and over time in the same patient.

- 1 Reducing stress levels, lowering anxiety and so reducing stress load on the body
- 2 Relieving psychological anxiety, pain and stress – psycho-immune theory
- 3 Releasing natural endorphins which reduce pain

The aspects of a placebo intervention–

- 1 Conditioning effect – band aid in the child relieving pain. Me and co-codamol aborting migraine. Look at conditioned responses – Pavlov work

- 2 Faith effect – putting your trust in a person or action you believe will help, based partly on condition and partly on experience. Thus the French like suppositories, the Germans injections, and the English their anti-biotics.
- 3 Positive thinking – hope encouraging self-healing processes
- 4 Sharing effect – sharing a problem with others lessens the impact of that problem – being able to tell the story, and having an empathetic ear reduces emotional levels.
- 5 Prayer aspect – works in 3 ways
 - a. Encourages a positive feeling in the patient – positive thoughts
 - b. Has a sharing effect as in 3 above
 - c. Involves the person's divine being, one of the strongest belief systems
- 6 Do no harm – nature heals itself, given time, if left alone. Lessens effect of side-effects of therapy
- 7 Context – such as battlefield injuries, or immediately after an accident (my story)

Importance to research of the placebo
Brief review of literature

Placebo has been misunderstood

In reality it is perceived by the therapist as a neutral intervention, but by the patient as an active intervention.

What do patient's believe about placebos?
How do patient's beliefs interact with a placebo intervention?
Who else plays a part?

Effect of the beliefs of –

- a) Doctors or researchers
- b) Patients
- c) Patients peer reference group in society

Faith is belief in action. Role of belief systems and world views in causation of illness and health care behaviour.

Belief in the Researcher

Belief in the patient

Putting our faith in something is the essential first step in seeking help, and determines our healthcare beliefs and therefore actions.

A little of what you fancy does you good. -

Faith is inherent in the soul of each person - role of soul briefly discuss. Also has a spiritual meaning, but just leave it here at the non-spiritual level and recognise the vital importance of faith.

Discuss faith healing and most alternatives

Leads us to recognise the importance of knowing the beliefs of people, how to recognise the benefits and disadvantages of certain faith patterns, and how to help people to change faith patterns which are harmful to them.

Fits into a whole-person view.

The doctor as teacher needs to supplant the mystical, priestly function of doctor as healer

Most important paper for me - in the BMJ about 30 yrs ago - the man with UC who died - and comment from GP. (find it)

How to use the placebo effect in everyday practice

- 1 LISTENING – hearing the patient's health story is a vital first step
- 2 DIAGNOSIS – needs to be a whole-person one, what are the various aspects contributing to the health problem being presented.
- 3 PATIENTS' BELIEFS – hear the underlying health beliefs of the patient as they tell their story, or through your past experiences with them.
- 4 VALIDATE the patient's story – help them to understand what has happened to them.
- 5 EXPLORE alternative options to their story which may be more helpful – doctor as teacher
- 6 STAND with them, indicate a willingness to see the problem through to the end.
- 7 ENCOURAGE developing new stories which are healthier – follow up

(? change 6 and 7 around)

LIT SEARCH

Belief systems

Cursing people with voodoo

What patients believe will make them better

Blaise Pascal (1623-62) “There are two excesses: to exclude reason, and to admit nothing but reason. The supreme achievement of reason is to realise that there is a limit to reason. Reason's last step is the recognition that there are an infinite number of things which are beyond it.”³

Dixon, M and Sweeney, K 2000, *The Human Effect in Medicine* Radcliffe Medical Press, Oxford. ISBN 1 85775 369 0

Good paper by David Spiegel as editorial in the BMJ (11.06 in database) – patients with medically unexplained symptoms were misdiagnosed by GPs who did not pick up on the psychological aspects of the story.

Paper by Pater Salmon et al in BJGP (11.05 in database)

Add synopsis of the above research

¹ Asher, R “Talking sense” ed Jones, F.A. Pitman Medical, London 1972, p4

² McCormick, J. “The contribution of science to medicine” Perspectives in Biology and Medicine 1993, vol 36 No 3 pp 315-322

³ Pascal B. (1657) London Penguin Books 1996 (translated by A.J. Kraisheimer)