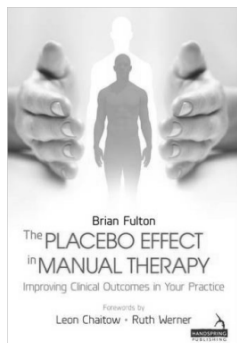


## The Placebo Response in Manual Therapy

- Improving Clinical Outcomes in Your Practice



1

## Effectiveness of manual therapies: the UK evidence report-

Bronfort, 2010

(Report on 49 relevant systematic reviews)

- “there is substantial evidence to show that the **ritual** of the patient-practitioner interaction has a therapeutic effect in itself **separate from any specific effects of the treatment applied**. This phenomenon is termed **contextual effects**. The contextual or, as it is often called, non-specific effect of the therapeutic encounter can be quite different depending on the **type of provider**, the **explanation or diagnosis** given, the provider's **enthusiasm**, and the patient's **expectations**.”

2

## Placebo response to manual therapy:

something out of nothing? -Bialosky, 2011

- Authors looked at 94 different research papers on manual therapy
- “We suggest that manual therapists conceptualize placebo not only as a comparative intervention, but also as a potential active mechanism to partially account for treatment effects associated with manual therapy. We are not suggesting manual therapists include known sham or ineffective interventions in their clinical practice, but **take steps to maximize placebo responses to reduce pain.**”

3

## Enhance placebo, avoid nocebo: How contextual factors affect physiotherapy outcomes.

Testa, Rossetini 2016

- “The difference in clinical success between two different PTs, both practicing with reference to the scientific evidence and application of the clinical guidelines lies in the different level of implementation of the “art” component of the profession. This is probably mostly due to behaviours that have **relevant effects on the clinical outcome through placebo or nocebo phenomenon**. The possibility of adopting knowledgeable, expert and ethical strategies to enhance placebo and avoid nocebo offers a valuable opportunity for every PT to enrich their therapeutic toolbox.”

4

## The Placebo Effect - Definitions

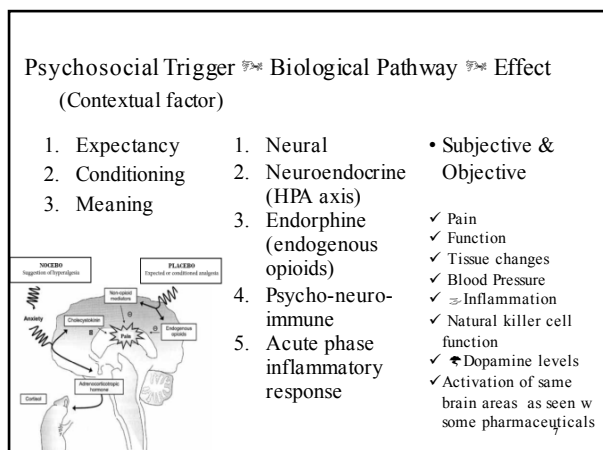
1. “A change in the body that occurs as a result of the **symbolic** significance which one attributes to an **event or object in the healing environment**”  
- Dr. Howard Brody M.D.
2. The mind’s ability to modulate innate healing pathways and systems within the body
3. Skeptics definition- A label we give to unexplained healing phenomenon

5

## Ted Kaptchuk- Director of “Program in Placebo Studies and the Therapeutic Encounter” at Beth Israel Deaconess Medical Centre Research at Harvard Medical School

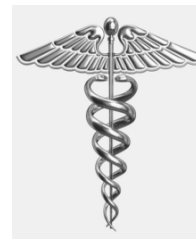
- “So a placebo is about: the attention, the eye gaze, the warmth, the compassion, the confidence of the physician in a doctor-patient relationship.
- I would say that the placebo is about the **symbols** of medicine, like the diploma on the wall, the prescription pad, and the stethoscope.
- I would say that a placebo is about the routine **rituals**; the procedures of medicine; waiting in the doctor's office, talking, disrobing, being examined, putting your clothes back on, getting a diagnosis, and then being prescribed pills, injections or procedures.”

6



### Reasons for Studying this Phenomenon

- Is not about using placebos in our practice, or using modalities that we know are not efficacious
- Is about the healing affect of factors such as the clinical environment, our words, the treatment modalities, and homecare rituals.
- **Is not about deception**
- **Is about magnification of the healing response** that exists in each and every one of our patients



8

### Application of these concepts are not a substitute for competence



- Knowledge, assessment skills, competency and technique are essential elements in manual therapy
- Understanding the placebo effect is not intended to replace competency, but rather to **augment** it.

9

### Should we attempt to magnify the placebo response in our practice?



- “There is no ‘choice’ about whether or not to ‘use’ the placebo effects. Those effects are going on in every medical encounter between patient and physician. They exist whether we want them to or not; whether we are consciously exploiting them or not. The ‘choice’ is about how we go about using them: well or poorly, blindly or thoughtfully.”

– Dr. Howard Brody, Director of the Institute for Medical Humanities of the University of Texas.

10

### Placebo Versus Morphine

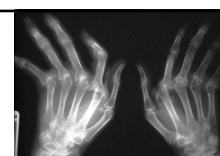


- Morphine produces 50% reduction in pain in approx. three quarters of post surgical Pts and people suffering traumatic pain.
- Placebos create similar (50%) reductions in pain but only in a third of patients.
- Still an impressive showing for the placebo.

Evans, F.J. (1985). *Placebo: Theory, Research and Mechanisms*. New York: Guilford Press

11

### Arthritis



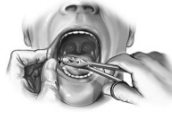
- A study of rheumatoid arthritis patients using placebos saw a 50% reduction in the number of inflamed joints as well as a 50% reduction in swelling and tenderness in forty percent of the participants.

Tilley, B.C. et al., (1995). Minocycline in rheumatic arthritis: a 48-week double-blind placebo-controlled trial. *Annals of Internal Medicine*. 122: 81-89

12

## Pain and Inflammation

Hashish, L., H.K Hai et al. (1986). Reduction of postoperative pain and swelling by ultrasound treatment: a placebo effect. *Pain* 33: 303-311

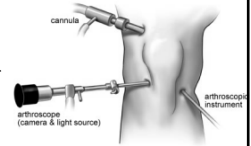


- Patients undergoing tooth extraction underwent ultrasound therapy for pain reduction
- A three armed experiment had
  - Group 1 - Control group (self massage with coupling cream)
  - Group 2 - US machine emitting US waves
  - Group 3 - US machine turned on, but emitting no US waves
- Subjects in groups 2 & 3 reported **significant reductions in pain** compared to the control group, and had **less visible swelling** (inflammatory response)
- Responses in groups 2 & 3 were virtually identical

13

## Knee Arthroscopy

Moseley, J.B. et al., (2002). A controlled trial of arthroscopic surgery for osteoarthritis of the knee. *NEJM* 11;347(2):81-8

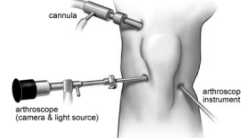


- 3-armed study at Veterans Administration Hospital at Baylor University.
- Eligible patients had osteoarthritis of knee as defined by the American College of Rheumatology, reported at least moderate knee pain despite maximal medical treatment
- Note\* - All patients provided informed consent, "On entering this study, I realize that I may receive only placebo surgery. I further realize that this means that I will not have surgery of my knee joint. This placebo surgery will not benefit my knee arthritis."

14

## Knee Arthroscopy

Moseley, J.B. et al., (2002). A controlled trial of arthroscopic surgery for osteoarthritis of the knee. *NEJM* 11;347(2):81-8

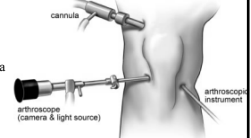


- Sham surgery study with 180 fully anesthetized, subjects
  - 1<sup>st</sup> group - Full arthroscopy with cartilage scraping
  - 2<sup>nd</sup> group - Arthroscope viewing with water flushing only
  - 3<sup>rd</sup> group - Only nicks to the skin
- Outcomes were assessed at multiple points over a 24-month period with the use of three separate pain scales and two scales for function (walking and stair climbing)
- Although **substantial improvements were seen, no statistically significant differences were seen between the three groups in either pain or function.**

15

## Knee Arthroscopy

Arthroscopic Partial Meniscectomy versus Sham Surgery for a Degenerative Meniscal Tear. Raine Sihvonen, Mika Paavola, Antti Malmivaara et al. *N Engl J Med* 2013;369:2515-2524



- 2013 parallel-group study at 5 orthopedic clinics in Finland on Pts with medial meniscus tears
- N= 146 (post-study crossover allowed)
- Participants randomly received arthroscopic partial meniscectomy or sham surgery
- "Although both groups had **significant improvement in all primary outcomes**, the patients assigned to arthroscopic partial meniscectomy had no greater improvement than those assigned to sham surgery."

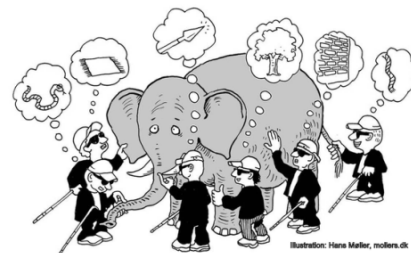
## Two important takeaways from these sorts of studies



1. Efficacy of the procedure/modality
2. The incredible power of the belief in that procedure (placebo effect)

17

## Semantics and Perspective



18

## Terms Used to Describe The Placebo Effect/Response

- The *Hope* Effect- Jerome D. Frank
- The *Belief* Effect- Dylan Evans
- The Healer Within- Roger Jahnke
- The Placebo Effect- MeSH term
- Placebo Response- MeSH term
- *Meaning* Response- Daniel Moerman
- *Contextual* Healing- Ted Kaptchuk
- Non-Specific Effects- MeSH term

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## Terms Used to Describe The Placebo Effect/Response

- Our Deep *Unconscious*- Freud, Jung, Taus
- The Body's Own Wisdom
- Healing Power of the *Mind*- Deepak Chopra
- *Meaning and Context* Effect- Wayne Jonas
- The *Endogenous* Healthcare System- Fabrizio Benedetti
- Releasing The Body's *inner Pharmacy*- Howard Brody
- **Psychosocial Factors** affecting clinical outcomes

20

### Harvard Medical School Program in Placebo Studies and the Therapeutic Encounter

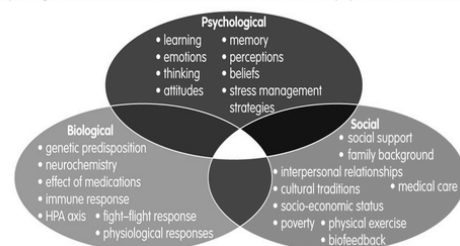


- In 2011, Harvard instituted the PiPS at Beth Israel Deaconess Medical Center
- PiPS' research areas include:
  - **Patient-Oriented Clinical Research**
  - **Research in Neuroscience and Molecular Biology**
  - **Research in the Social Sciences**
  - **Research Methodology**
  - **Initiatives in the Humanities and Bioethics**
- Clearly the Placebo Effect is now obtained legitimacy.

21

### Biopsychosocial approach versus the biomedical or structural approach treats the individual, not the condition

- **biopsychosocial framework:** an approach to describing and explaining how biological, psychological and social factors combine and interact to influence physical and mental health



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### Interesting Phenomenon Surrounding the Placebo Response



- The effects of a placebo generally increase if pill is larger; yet tiny pills also appear to have a more powerful effect
- Warmer-coloured pills work better as stimulants; cool-colored pills work better as depressants
- The effects will increase if the placebo is taken with increased frequency (conditioning theory).

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### Interesting Phenomenon Surrounding the Placebo Response



- Increased frequency of visits to the attending health professional increase the effectiveness of the placebo
- Being told that a placebo will decrease pain will decrease most people's experience of pain
- Being told that that same placebo makes pain worse will increase most people's experience of pain.

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### Interesting Phenomenon Surrounding the Placebo Response



- New or novel treatments typically beat out older ones
- The severity of pain of the intervention influences the placebo response. With increased pain there is increased placebo response.  
(invasive, uncomfortable, sophisticated or painful interventions tend to enhance the placebo effect)

25

### Interesting Phenomenon Surrounding the Placebo Response



- The more significant the symbol, the more powerful the placebo effect is likely to be. Surgery is at the high end of that scale.
  - capsules beat out tablets
  - injections beat out drugs administered orally
  - injections that sting work better than injections that do not sting
  - medical treatment machines beat out injections
  - sham surgery is considered the most powerful placebo

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### Interesting Phenomenon Surrounding the Placebo Response



- A placebo administered by a doctor is more potent than a placebo administered by a clerk. Even less effective is a placebo sent via postal delivery
- Brand name placebos work better than generic placebos
- More expensive placebos tend to be more powerful than discounted ones.

27

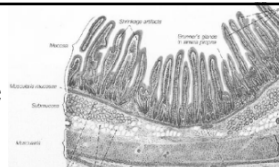
### Interesting Phenomenon Surrounding the Placebo Response



- The more that people adhere to their placebo schedule, the better their outcome. This is even seen in patient mortality figures
- People have actually experienced withdrawal symptoms after long-term use of placebos
- Placebos have been shown to be geographically and culturally variable

28

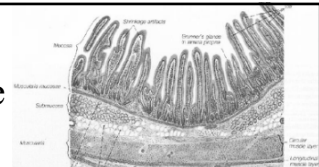
### Objective Results From Placebo Use



- Multiple studies have found measurable objective changes in the placebo control group over a wide range of treatments with objective findings such as:
  - Tissue changes
  - Exercise tolerance
  - Pupil contraction/dilation
  - Blood Pressure
  - Increase/decrease in smooth muscle activity.

29

### Objective Results From Placebo Use



- Multiple studies have found measurable objective changes in the placebo control group over a wide range of treatments with objective findings such as:
  - $\Delta$  or  $\uparrow$  in spinal reflexes (involuntary contractions)
  - $\Delta$  in neural activity, hormone release, gastric levels
  - $\Delta$  in inflammation and acute inflammatory response.

30

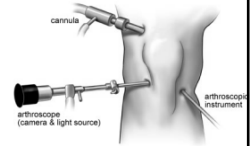
## Do placebo effects last?



- In experimental trials for treatment of panic, angina, rheumatoid arthritis- the placebo effect was shown to last for up to thirty months - The Placebo Effect and Health. Thompson, 2005:45
- A 96-week study of rosiglitazone (used to treat psoriasis) found placebo responders' improvement lasted for the full duration of the study. - Ellis 2007

31

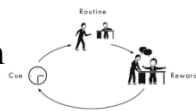
## Do Placebo Effects Last?



- Knee debridement sham surgery study- patients assessed over a 24-month period with the use of five self-reported scores--three on scales for pain and two on scales for function (objective test of walking and stair climbing)
- During the full 24 months of this study, neither of the intervention groups reported less pain or better function than the placebo group.

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## Maintaining Effects Though Ritual, Habit, or Belief



- Theoretically the placebo effect, can continue for a lifetime (w proper conditioning & expectations)
- Incorporation of ritual, through conditioning is probably older than written history itself, and the conditioning theory of placebos involves that same concept

33

## Nocebo Effect



- "Be careful reading health books. You could die of a misprint."- Mark Twain
- When, given sugar water but told that it was an emetic, 80% of patients in one study responded by vomiting
- A review of 77 publications revealed side effects such as **drowsiness, headaches, nervousness, insomnia, nausea and constipation** are among the commonly reported side effects from taking placebos

34

## The Nocebo Effect



- Another systematic review found side effects such as **nausea, diarrhoea and skin eruptions** from taking placebos.
- Japanese lacquer tree experiment. Immediate paradoxical reactions in more than 1/2 of participants

35

## Withdrawal Symptoms After Placebos are Discontinued



- In a Women's Health Initiative study of hormone replacement therapy for menopause, women had been on placebo for an average of 5.7 years.
- After discontinuation (d/t cardiac & cancer concerns) **40% of women using placebos reported moderate or severe withdrawal symptoms** vs. 63.3% on hormone therapy

Ockene, J.K. et al, (2005). Symptom experience after discontinuing use of estrogen plus progestin. *JAMA* 294 (2): 183-93

## The Nocebo Effect



- As a therapist are you cautious with wording around matters such as treatment risks and side effects?
- If you think that the prognosis is not good, what type of phrasing would you use?
- Warnings concerning Tx pain & post-Tx pain

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## Ethical Considerations for Manual Therapists



- Using placebos or non-efficacious treatments is simply unethical.
- However, it appears that there is a placebo component to even the most efficacious modalities
- ∴ PE is in play with all of your treatments
- For informed consent, the phrasing could go as follows:

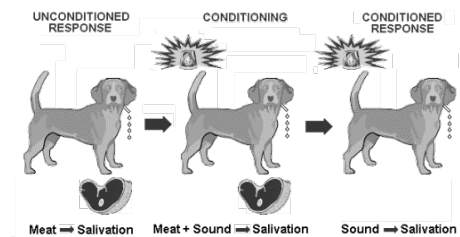
38

## Augmenting the Placebo Response in Your Patients

1. Conditioning
2. Expectancy, Belief, Hope (suggestion)
3. Meaning

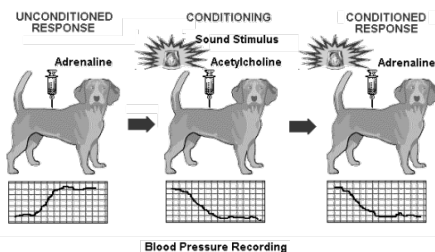
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## Conditioning



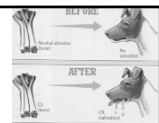
40

## Blood Pressure Conditioning



Other experiments have created paradoxical conditioned responses with placebos to pain, the immune system and other body systems

## Placebo Effect in Animals Using Conditioning

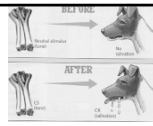


- Cyclophosphamide is a powerful immune system depressant with toxic side effects
- Studies on rodent populations have shown immune system conditioning using taste and scent conditioning with cyclophosphamide

Pavlovian conditioning of immune function: animal investigation and the challenge of human application. Behavioural Brain Research 110 (2000) 129 – 141. Michael S. Exton, Anne Kristin von Auer, Angelika Buske-Kirschbaum, Ursula Stockhorst, Ulrich Gobel, Manfred Schedlowski

42

## Application in Humans



- Several case reports on humans with autoimmune disorders using scent and taste conditioning produced consistent immune system responses allowing experimenters to reduce drug use by 66% (1 dose in 3) and still achieve the same response

Pavlovian conditioning of immune function: animal investigation and the challenge of human application. Behavioural Brain Research 110 (2000) 129 – 141. Michael S. Exton, Anne Kristin von Auer, Angelika Buske-Kirschbaum, Ursula Stockhorst, Ulrich Gobel, Manfred Schedlowski

43

**Ocean**

Conditioning

**Muscle Spasm**

- In human beings, a second system of signals (language) increases the possibilities of conditioning
- For human beings, words can function as stimuli, so real and effective, that they can mobilize us just like a concrete stimulus

**Winter**

44

## Conditioning - Frequency

- Meta-analysis has shown that **increased frequency** of placebo use **leads to increased improvement** in test subjects
- Justification for **frequency** in remex regimen
- Same principle applies to the number of repetitions within an exercise schedule
- However if the exercise schedule becomes too onerous, then patient compliance will be reduced.

45

## Compliance

- Pts who take all their placebos do significantly better than those who took only 80% of them
- Results mimicked those in the active Tx groups
- This has been shown for studies of heart attack survivors, post-chemotherapy infections, treatment of schizophrenia to name a few.

*The Meaning Response: Thinking about Placebos.* Daniel E Moerman. Academia.Edu

46

## Conditioning in Practice



### Reinforcing Positive Conditioning

- Use techniques, approaches, modalities with which Pt has had positive success
- Put a new twist on conditioned technique
- Add new technique to beginning or end of conditioned technique
- Link remex & homecare to positive clinical success

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## Conditioning



- Remind Pt of previous success and add a homecare suggestion
- Use previous successes to progress into next Tx regime
- Remind patient of previous improvements

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## Enhancing Conditioning

- Focus on realistic short term goals- e.g. "Focus on ROM - over the next few days. You will begin to notice that you are feeling 'freer and looser'. Do not focus on the pain. That will soon pass."
- Focus on quantifiable Progress-e.g.  $\Delta$ ROM,  $\blacksquare$ Pain, Improved function
- Increase frequency of remex and/or homecare
- Increase frequency of Tx
- Accountability- have Pt record their remex (compliance)

49

## Breaking Negative Conditioning



- Different Technique- "I'd like to try a technique that I haven't used on you previously. I've have very good results on other patients with this same condition"
- Brand new technique/modality
- Different order
- Change intensity, rhythm, approach
- Change environmental cues (music, lighting, etc.)
- Have Pt focus on a positive healing image

50

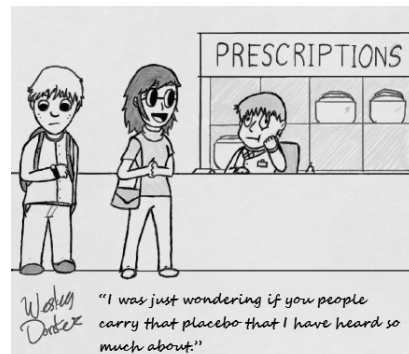
## Breaking Negative Conditioning



- Link new technique to a failed technique - e.g. Add modality that they have positive association
- Completely different approach
- Highlight successes that you have had with other patients with a technique/approach, modality
- Raise Pt's hopes

51

## Expectancy, Belief, and Hope



52

## Power of Suggestion (Expectations)



- In one study, women who believed it was very likely that they would have severe nausea from chemotherapy were **five times** more likely to experience severe nausea than fellow patients who thought its occurrence would be very unlikely.

Roscoe, J et al. (2004). Patient expectation is a strong predictor of severe nausea after chemotherapy. *Cancer* 101 (11): 2701 – 2708

53

## Lose Weight Through Belief

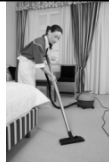


- A study of workers in 7 hotels and looked at relationship between health and mind-set
- Each of 7 hotels was randomly assigned to one of two conditions: informed or control.

Crum, Alia J., and Ellen J. Langer. (2007). Mind-set matters: Exercise and the placebo effect. *Psychological Science* 18, no. 2:165-171.

54

## Lose Weight Through Belief



- The participants who 'believed' their jobs gave them adequate exercise showed a **decrease in weight, blood pressure, body fat, waist-to-hip ratio, and body mass index**
- The group who did not adopt this belief system saw none of these changes.

55

## Expectancy



- Japanese lacquer tree study of 57 blindfolded high school students
- Immediate paradoxical reactions in more than half of the students
- This happened despite the fact that many of the participants were previously sensitised to lacquer leaves with severe allergic skin reactions.

56

## Expectancy

- Expectancy also explains the sham surgery success
- The placebo effect is not just a temporary effect. Sham surgery results lasted for years in many patients
- **Note\* -practitioner's expectations effect outcomes.**

57

## Expectancy

- Injections that sting work better than injections that don't
- **The more powerful the symbol, the more powerful the effects are** (surgery scoring highest)
- Brand name placebos work better than generic placebos
- More expensive placebos perform better (within reason)
- New highly-hyped treatments typically show very high placebo responses

58

## Employing Expectancy in your Practice



- Set easily attainable initial goals
- Measure Pt's progress
- Informed consent and nocebo effect- always offer solutions
- Trying out a new technique
- Tout other Tx successes
- Be aware that subtle therapies have less inherent placebo effect

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## Employing Expectancy in your Practice



- Positive self-talk (both therapist & client)
- Examine your own belief systems.
- "Create a reality" for your client
- Create expectations- e.g. Indicate that function will increase first (feeling freer and looser).
- Always offer hope
- Always keep the door open to full recovery

60

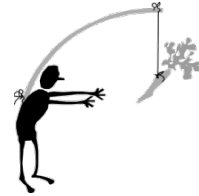
## Meaning

“Meaning makes a good deal of things bearable..... perhaps everything” Carl Jung



61

## 1) Motivation and Desire



- “If you're going through hell, keep going”- Winston Churchill

62

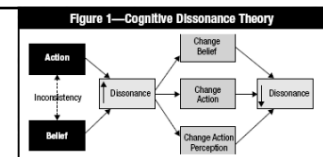
## 2) Trust



- Trust is the foundational principle that underpins all relationships, human or otherwise
- Anything that builds practitioner-patient trust will enhance the placebo response
- Any undermining of trust will diminish the effect
- Once trust is lost, it is difficult to rebuild.

63

## 3) The Power of Certainty



- Importance of thorough testing
- Benefits of a clear diagnosis
- The body language of certainty
- Cognitive dissonance robs energy from body, its capacity to self-heal
- Can you nudge your patients off the fence?

\*64

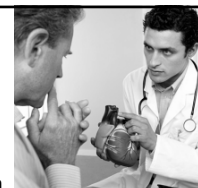
## 4) Feeling Listened To



*“Listen to your patient  
- They have inside information”*

65

## 5) Adequate Explanation of the Pathology



- This will depend upon the person
  - What is adequate for one person may be superficial to another
  - The detail required by some is too technical for others
- Pain is not just pain - e.g. the pain of a powerful contusion is interpreted very differently from cancer pain
  - Help your client to understand that their pain is part of a process- a process that you will help to guide them through.

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## 6) Feeling of Care and Concern From the Practitioner

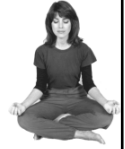


- *"No human interaction is neutral. It is either healing or wounding."* -Dr. Balfour Mount
- Studies show positive healing effects from practitioners and support staff showing genuine care and concern for hospital patients.
- *"The secret of the care of the patient is in caring for the patient"* - Francis Peabody

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## 7) Establishment of a Feeling of Control Over One's Illness or Symptoms

- Control and mastery can happen in two ways
  - Personal control
  - Trust in powerful persons/entity(ies) who have control



## 8) Enhancing Meaning Through Stories



- *"There have been great societies that did not use the wheel, but there have been no societies that did not tell stories."* - Ursula K. Le Guin

69

## 9) Time Spent with the Patient



- Studies demonstrate that for visits between 16 and 30 minutes in length, it is not the actual time spent with the physician that affects outcome, but rather what happens during that time
- Study of 59 MDs found those whose avg. consult time was 18.3 mins. experienced less malpractice claims than MDs with avg. consult time of 15 mins.

70

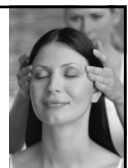
## 10) Use of Ritual



- "Verbal suggestions are not the only means to induce expectations. The whole therapeutic setting (health professionals, medical instruments, hospital environment) represents what can be called the ritual of the therapeutic act. Indeed, drugs are less effective without therapeutic rituals." - Fabrizio Benedetti M.D., Professor of Physiology and Neuroscience at the University of Turin Medical School

71

## 11) Use of Touch



- We have a strong advantage here over most other health professions
- Use of *meaning* is very important here, especially when touch is uncomfortable or painful for the patient, or is near sensitive areas

\*72

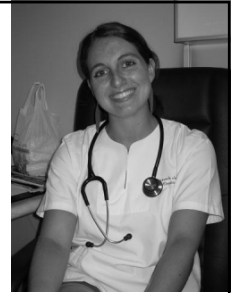
## 12) Clinician's Persona

- “The doctor who fails to have a placebo effect on his patients should become a pathologist.” – J.N. Blau
- You are a symbol
- One way to view this is that you ARE the placebo.



## Clinician's Persona Involves

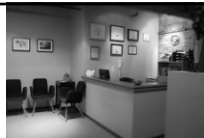
- Attire
- Professionalism
- Enthusiasm
- Confidence
- Perceived Competence
- Clinician's Belief System



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## 13) Clinical/healing Environment

- Diplomas and certificates prominently displayed
- Bookcase with medical reference material
- Patient education brochures and patient reference material
- Anatomical models giving a clear 3-dimensional perspective on various body structures
- Professional attire for both practitioners and staff
- Medical and anatomical charts displayed on walls



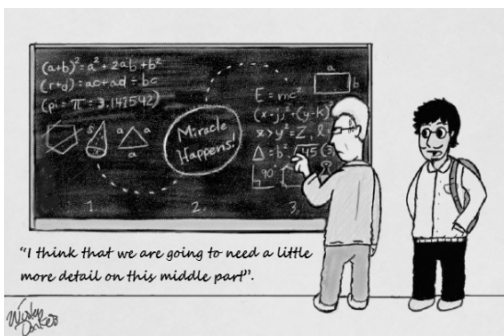
## 14) Practitioner's Use of Humour

- Patch Adams sees humor as being important in the following four areas:
  1. Helps prevent practitioner burnout - supported by research
  2. Is a painkiller for patient - supported by research
  3. Sets an environment for cooperation
  4. Serves to level the issue of hierarchy in the therapeutic relationship, which Adams sees as key



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## 15) Acceptance of the *Mystery* of Healing



## 16) Reducing Your Patients Anxiety Levels

“Man is not worried by real problems so much as by his imagined anxieties about real problems” – Epictetus

- Link between overstimulation and disease is well established. The list involves at the very least: hypertension, atherosclerosis, cardiac distress, cardiac arrest, osteoporosis, memory loss, accelerated aging, stomach ulcers, fibromyalgia and chronic pain syndromes, eczema, and vulnerability to infections.



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### How Powerful is the Placebo Effect in respect to Conditions that We Treat?



- Placebo response is quite strong in areas of:
  - Acute pain
  - Chronic pain (including headaches)
  - Inflammation including tumor (swelling), rubor (redness), calor (heat) and dolor (pain)
  - Many quantifiable aspects of function (since pain often limits function)
  - Hypochondria

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### Recurring Themes Surrounding the Placebo Effect

- Importance of **Trust** in the practitioner/patient relationship
- Importance of **Professionalism**
- Effect is augmented with increased knowledge, assessment skills, competency and technique
- **The locus of control** needs to ultimately lie within the patient not you
- Importance of getting patient's mind 'in the game'

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### Recurring Themes Surrounding the Placebo Effect

- The more powerful the treatment (and the symbol) ~~the~~ the more powerful the effect
- **Be aware of nocebo effects** when listing potential side effects of any modality or Tx
- It is important for you to '**know**' that your patient's body knows how to heal itself
- **Err on the side of positive** with projections (expectation theory)

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### Recurring Themes Surrounding the Placebo Effect

- The patient's conscious and subconscious mind both must come to '**know**' this
- You, your words, your actions, treatment rituals, the clinical environment are all psychosocial triggers that affect clinical outcomes. (**contextual effects**)
- This is not about deception; it is about magnification of the healing response that exists in every individual
- Placebo effects are going on in **every** medical encounter between patient and practitioner. They exist whether we want them to or not.

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### Recurring Themes Surrounding the Placebo Effect

- Always remember that all success is the patient's success, not your success. (Remove the ego)
- Like all therapy, it needs to be tailored to the patient. What works for patient X doesn't necessarily work on patient Y.
- Understanding placebo effect in the clinical environment ultimately comes down to **meaning and context**. This milieu generates psychosocial triggers within the patient that act as triggers to initiate this effect.

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### Sample Phrasing of this Phenomenon for your Patients



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“Any medical intervention has limits. Beyond that, the body must bring itself back into balance.

The good news is that your body **knows** how to repair itself. As a patient it is important to realize that your health is largely your own responsibility.

Studies show that your relationship with your healthcare provider, your beliefs, attitudes, lifestyle and diet can all augment or impair this healing process.”

85

The words "Thank You" are written in a large, bold, black, sans-serif font. The letters have a slight 3D effect with a soft shadow cast to the right and slightly downwards.

86