

# Placebo

A placebo is a medical treatment (f.e. operation, therapy, chemical solution, pill,...). Placebo is administered like conventional therapy, but this treatment has no therapeutic value other than the placebo effect.

Experimenters typically use placebos in the context of a clinical trial in order to compare “test” receiving real group and “control” group receiving placebo. It can then be determined if results from the test group exceed those due to the placebo effect. If they do, the therapy or pill given to the test group is assumed to have had an effect.

Often during these clinical trials, placebos have a positive or negative clinical effect on subjects tested. Most of these effects are presumed to be psychological in nature but placebo effects can at times be predictable and measurable.

## History and evolution

- 18th century – “commonplace method or medicine”.
- After 25 years – “any medicine adapted more to please than to benefit the patient”, but without the non-effect factor.
- 1903 – Richard Cabot “I have not yet found any case in which a lie does not do more harm than good”.
- A half century after – Henry K.B. observed improvements in his patients lives, while they were taking a placebo treatment.
- During the 20th century, placebo was widespread in medicine area.
- And nowadays, it’s impossible to work in a hospital without the placebo effect.

## What’s placebo

- In a medical dictionary, we can find at least, two definitions for placebo:
  1. a substance having no pharmacological effect but administered as a control in testing experimentally or clinically the efficacy of a biologically active preparation.
  2. a substance having no pharmacological effect but given merely to satisfy a patient who supposes it to be a medicine.

### add. 1.

- We can use it to study the effectiveness of medicines and psychotherapy treatments or alternative therapies. à two groups of people with the same diseases are divided: one of them is applied with the real treatment. The other one has a non-activated treatment – placebo effect. The treatments or therapies are only approved when the results surpass the results of the no-medicated group. Those studies prevent patients from deceptions.

### add. 2.

- Is a non pharmacological substance, unrelated with the symptoms or illness of the patients, but, nevertheless, reacts in them. Patients are given an inert pill and told that their health conditions may improve, hiding the inert factor. The belief, conviction of patient in medical words is the key for the treatment, because they really think that their health condition will rise and this belief does indeed sometimes have a therapeutic effect, causing the patient's condition to improve. This phenomenon is known as the placebo effect.

## The belief, conviction of patient in medical words is the key for the treatment...

- Only 35% of patients are influenced by placebo.
- That placebo has individual effects.
- We cannot generalize the process of this type of treatment.

## How to take Placebo

### Active placebos

Have no chemical substances and so, they are inert e. g. flour pill, sugar pill.

### Inert placebos

Have substances with pharmacologic properties indicated for the treatment of pathologies unrelated with the one which want to be cured. They are still inert.

# Placebo may be affective due its properties

It can decrease the anxiety of the patient, thus reveals a series of organic responses that delay the spontaneous healing:

- Increased heart rate and respiratory.
- Production and release of adrenaline into the bloodstream
- Contraction of blood vessels.

## But how could placebo cure some diseases?

- Our body and brain are linked.
- After taking the simulated medication – placebo – the prefrontal brain recalls the placebo and maintaining its cognitive presence in a “self-reinforcing feedback”.
- Recent studies have shown that a placebo can reduce pain-related neural activity in the spinal cord, indicating that placebo effects can extend beyond the brain.

## How long can take the placebo effects?

Placebo effects both can take a short or long period of time. For example:

- Panic disorder – over 8 weeks
- Angina pectoris – 6 months
- Rheumatoid arthritis – 2.5 years

## Which diseases can be submissive to Placebo effect?

- panic disorder, angina pectoris and rheumatoid arthritis:
- Anxiety disorders; Asthma; Autism; Benign prostatic enlargement; Binge eating disorder; Bipolar mania; Crohn's disease; Depression; Dyspepsia and gastric motility; Epilepsy; Food allergy; Gastric and duodenal ulcers; Head hack; Hypertension; Parkinson's disease; Premenstrual dysphoric disorder; Rheumatic diseases; Sexual dysfunction: women; Social phobia; Ulcerative colitis;
- Some surgeries can be replaced for the placebo resort.
- The placebo effect occurs more strongly in some conditions than others.
- Pain: can be supported mainly in postoperative time, instead of the medicines using.
- Depression: a study about the using of placebo in depressed people showed that 79% of depressed patients receiving placebo remained well compared to 93% of those receiving antidepressants.
- Gastric and duodenal ulcers: gastric or duodenal ulcers can be controlled by placebo treatments – in many cases are as effective as active medicines.

## Nocebo

Negative consequences

- bad mood;
- requirement of sleep;
- hunger;
- fatigue;
- nausea;
- nocebo, derives from Latin, “nocere” = damage.

## Links

### Related articles

### Sources

## Resources

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## References

