

THE PLACEBO EFFECT IN MEDICINE

Purici Vasile Ghenadie

Student Nicolae Testemițanu State University of Medicine and Pharmacy, Republic of Moldova, Kishinev

Dragan Boris Ivan

научный руководитель, Doctor of Medical Sciences, Associate Professor Nicolae Testemițanu State University of Medicine and Pharmacy, Republic of Moldova, Kishinev

According to a commonly accepted definition, a placebo is an inert treatment without specific therapeutic properties for the condition being treated. Placebo effects are the positive outcomes that may follow the administration of a placebo and are due to the psychosocial context surrounding the therapeutic act. There is also evidence that placebo effects can occur in clinical practice, even if no placebo is administered. [1]

Placebo is a phenomenon of great interest in medicine due to its effects on various diseases and its involvement in clinical trials. The term "placebo" comes from the Latin "placer," meaning to please.

There are two types of placebos: a "pure" placebo, which refers to an inert substance, and an "impure" placebo, which refers to substances with known pharmacological activity but used in subtherapeutic doses or as incorrect prescriptions.

The literature also addresses conceptual differences between placebo, placebo response, and placebo effect.

Mitsikostas et al. [2] define these differences as follows:

- "substances and interventions are considered placebos when they lead to a beneficial outcome after administration or application, even though their active ingredients do not have this potential. Active ingredients include pharmacologically active compounds, psychological interventions, physical manipulations, and others (e.g., simulated surgical interventions, simulated stimulation, etc.)."
- \bullet "place bo response consists of any favorable health change that occurs before and after place bo administration or application"
- "placebo effect refers to those beneficial health changes observed after placebo administration or application, which are exclusively attributed to placebo mechanisms, such as expectation, conditioning, observational learning."

The clinical use of the placebo effect has led to the development of hypotheses regarding the molecular basis involved in its mechanism of action. According to the hypothesis, the placebo effect results from the integration of psychological, neurological, endocrine, and immune changes that generally favor the well-being of individuals and could be used in conjunction with conventional treatment of multiple diseases [3].

Placebo studies encompass a wide range of disciplines, from biomedical and neuroscience to social and behavioral sciences and humanities.

It is a controversial subject, which is addressed with great interest in medicine due to the findings of the last decades, so much so that there is even a journal exclusively dedicated to the subject: "Journal Interdisciplinary Placebo Studies" [4]. At the same time, some authors do not recommend the use of placebo in clinical practice because it offers no clear benefit and is weakly pronounced and irregular. [5]

Conclusion: Although the intensity and frequency of the placebo effect are difficult to determine in clinical practice, placebos should be considered by physicians and nurses as another therapeutic option that, alone or in combination with other treatments, could be useful in certain circumstances. Based on the above, we believe that information on the indications, limitations, and contraindications of placebos should be included in medical and healthcare programs.

References:

- 1. Frisaldi E, Shaibani A, Trucco M, Milano E, Benedetti F. What is the role of placebo in neurotherapeutics? Expert Rev Neurother. ianuarie 2022;22(1):15–25.
- 2. Mitsikostas DD, Blease C, Carlino E, Colloca L, Geers AL, Howick J, et al. European Headache Federation recommendations for placebo and nocebo terminology. J Headache Pain. 25 septembrie 2020;21(1):117.
- 3. Wager TD, Atlas LY. The neuroscience of placebo effects: connecting context, learning and health. Nat Rev Neurosci. iulie 2015;16(7):403–18.
- 4. JIPS | journal of interdisciplinary placebo studies DATABASE [Internet]. 2023 [citat 5 martie 2023]. Disponibil la: https://jips.online/
- 5. Maher CG, Traeger AC, Abdel Shaheed C, O'Keeffe M. Placebos in clinical care: a suggestion beyond the evidence. Med J Aust. 19 septembrie 2021;215(6):252-253.e1.