Understanding Placebo and Nocebo Effects in Clinical Practice

The word “placebo” is derived from Latin which means “I will please.” It was first identified in 1799 by an English doctor named John Haygarth and then became firmly established in a medical dictionary in the early years of the 19th century.

Similarly, nocebo, which means “I will be harmful” was described in the early 20th century for its antithetical effects of placebo.

Historically, both placebo and nocebo were thought to arise from biases in subjective reporting, however, increasing evidence continues to indicate neural mechanisms associated in the mediation of these responses.

With that being said, the two words have become quite ambiguous and widespread within many different medical contexts.

What was once believed to be a result solely from deception has now perplexed many clinicians and researchers in search for an understanding behind this complex phenomenon

A placebo response is dependent on a variety of factors including the therapeutic message, expectations of the patient, and the context in which the message was delivered.

It does not have to solely rely on deceiving, but more so empowering patients of their capabilities.

Similarly, nocebo is believed to be a result of willfully implementing fear into a patient. However, simple suggestions and subtle insinuations can also result in obtaining a nocebo response.

Yes, deception is still considered placebo, yet this does not mean we need to ignore all the other helpful beneficial factors associated with mediating a placebo response.

And yes, willfully creating fear should always be avoided, but we must be mindful of what we are saying and how it is perceived to avoid any misinterpretation resulting in harm.

The words you use matter, so make sure you choose them wisely to best serve in helping your patients improve!

References

1. Colloca L, Grillon C. Understanding placebo and nocebo responses for pain management. Curr Pain Headache Rep. 2014 Jun;18(6):419. doi: 10.1007/s11916-014-0419-2. PMID: 24771206; PMCID: PMC4142751.
2. Benedetti F. Placebo and the new physiology of the doctor-patient relationship. *Physiol Rev*. 2013;93(3):1207-1246. doi:10.1152/physrev.00043.2012

3. Bingel, Ulrike Placebo 2.0: the impact of expectations on analgesic treatment outcome, PAIN: September 2020 - Volume 161 - Issue - p S48-S56 doi: 10.1097/j.pain.0000000000001981
4. Manchikanti L, Giordano J, Fellows B, Hirsch JA. Placebo and nocebo in interventional pain management: a friend or a foe--or simply foes? Pain Physician. 2011 Mar-Apr;14(2):E157-75. PMID: 21412379.
5. Benedetti F, Frisaldi E, Shaibani A. Thirty Years of Neuroscientific Investigation of Placebo and Nocebo: The Interesting, the Good, and the Bad. Annu Rev Pharmacol Toxicol. 2022 Jan 6;62:323-340. doi: 10.1146/annurev-pharmtox-052120-104536. Epub 2021 Aug 30. PMID: 34460317.