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Using Placebo for Covid-19

Miri D* and Gharibzadeh S

Cognitive Rehabilitation Clinic, Institute for Cognitive & Brain Sciences (ICBS), Shahid Beheshti University, Tehran, Iran

Dear Sir,

Placebo is an inert substance that looks like an active drug. It can also be used widely in a variety of other interventions such as artificial medicine, and applied simulated psychotherapy. In fact, it is any inactive or artificial intervention that manipulates the causes of the disease or its symptoms in a non-specific way [1]. There are different approaches on the effectiveness of placebo. Some researchers believe that Hawthorne effect, regression to the mean, Cognitive Dissonance, the experimental tendency to satisfy the examiner or therapist, and the therapeutic alliance could be the reasons for the placebo [1]. In other way, Placebo effect Proponents believe that it makes the physiological change so it can not limited to the patient's personal report. For example in People with Parkinson's disease, the placebo increase dopamine secretion [2] and some others believe that the placebo mechanism is effective because of expectation and conditioning. Expectations are one of the most important factors in placebo "expectations are defined as specific cognitions about the likelihood of future events" [2-3]. These expectations can be gained through personal experiences, like learning-Observational Learning-Physicians Instructions-social media-Personal Information and other factors [4]. These researchers state that placebo can have many effects on the immune system by creating positive expectations, especially when patients are conditioned on these expectations [5].

How placebo can be used for covid-19? We suggest using placebo for covid-19 in several different ways: The first one is about patients who have been infected with the virus and they need to keep their spirits up for preventing exacerbation. In these patients, we can use placebo to reduce the pain caused by the disease. Several studies have demonstrated that placebo is effective on reducing pain for patients with various diseases. Among the areas related to pain in which placebo is affected are: ACC (Anterior Cingulate Cortex)+THA (midline thalamus) OR periaqueductal gray + cingulate cortex [6]. Drug-induced analgesia may be due to activation of endogenous opioids so we can use these effective mechanisms to reduce the patients pain, for those who are in critical condition. We can use placebo in addition to all the medications that are commonly used for patients with this disease. Note that Placebo can be used as a pill, psychological treatment or non-pill medical procedures [4].

Our next suggestion is to use placebo to preventive action on viral diseases. In order to strengthen people's immune system and reduce stress due to fear of the disease, which Leads to cortisol excessive increase and weakening of the immune system, we offer a drug or ineffective intervention. This placebo can be an herbal medicine, which has no effect on the treatment of viral diseases. Or a new type of health protocol in addition to all existing protocols. Of course these methods shouldn't be in a way that people who are using them think that they can be present in society without consideration the necessary points and health protocols. And it should be mentioned, that People should know that as they are using the main protocols, they should follow this protocols too.

References

1. Perlisa ML, McCallc WV, Jungquistd CR, Pigeona WR, Mattesona SE. Placebo effects in primary insomnia. *Sleep Med Rev.* 2005; 9: 381-389.
2. Lidstone SC, Schulzer M, Dinelle K, Mak E, Sossi V, Ruth TJ, et al. Effects of expectation on placebo-induced dopamine release in Parkinson disease. *Arch Gen Psychiatry.* 2010; 67: 857-865.
3. Schedlowski M, Enck P, Rief W, Bingel U. Neuro-bio-behavioral mechanisms of placebo and nocebo responses: implications for clinical trials and clinical practice. *Pharmacol Rev.* 2015; 67: 697-730.
4. Petrie KJ, Rief W. Psychobiological Mechanisms of Placebo and Nocebo Effects: pathways to improve treatments and reduce side effects. *Ann Rev Psychol.* 2019; 70: 599-625.
5. Miller FG, Kaptchuk TJ. The power of context: reconceptualizing the placebo effect. *J R Soc Med.* 2008; 101: 222-225.

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*Correspondence:

Delnia Miri, Cognitive Rehabilitation Clinic, Institute for Cognitive & Brain Sciences (ICBS), Shahid Beheshti University, Tehran, Iran.

E-mail: denia.miri@yahoo.com

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6. Peciña M, Bohnert ASB, Sikora M, Avery ET, Langenecker SA, Mickey BJ, et al. Association Between Placebo-Activated Neural Systems and Antidepressant Responses Neurochemistry of Placebo Effects in Major Depression. *JAMA Psychiatry*. 2015; 72: 1087-1094.