

WHEN EXPECTATIONS BECOMES REALITY- THE NOCEBO PHENOMENON.

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What is the Nocebo Effect?

The Nocebo effect and The Placebo Effect are two sides of the same coin. The term Nocebo has been derived from the Latin word “nocere” which means “to harm” whereas the term Placebo has been derived from the Latin word which means “I shall please”. The Placebo Phenomenon is one in which a patient feels better after the usage of substances which do not contain any medical effects but that is ‘perceived’ to bring beneficial impact. These substances that do not contain any medicinal effect is called as “dummy treatment” or “placebo”.

The Nocebo Effect is the opposite of the Placebo effect wherein the mere mention of a side effect or negative symptom of a medicine can bring about the symptom in the patient even though, the medicine is a “placebo” or a “dummy treatment”. Expectation of the drug causes the negative symptoms to occur in them.

In one study, 2 groups (Group A and Group B) of 25 people each, suffering with chronic back pain were to do a flexibility test. Group A was informed before taking the test that it might cause some pain whereas group B was not informed about such pain. After the flexibility test, Group A reported suffering a higher amount of pain than group B despite having done the same test. This shows that the information given to Group A about the pain induced expectation of that pain which led them to feel the negative symptom (pain) whereas Group B ignorant about such pain did not have any expectations which led them to feel less bothered about the negative symptom (pain) as compared the other group.

In a case study, researches recorded an individual who had swallowed 26 pills in an attempted suicide. The individual, unaware that the swallowed pills were just “placebo pills” or “sugar pills” experienced dangerously low blood pressure and required various injections to be stabilized again, since he believed that the pills were highly poisonous, he expected all the negative symptoms of an overdose (low blood pressure, lightheadedness and fainting) and such expectations resulted in him getting sick with all the symptoms. When he was informed that these pills were just sugar pills, the symptoms went away quickly.

Origin of Nocebo Phenomenon

This is not a new-found phenomenon. In 1961, Walter P. Kennedy identified this phenomenon to describe the negative effects experienced when a patient is give a “dummy treatment” or a “placebo treatment”.

Causes of Nocebo Effect

The points mentioned below are some out of many factors that influence the Nocebo Effect:

- 1) **Level of Anxiety:** The moods of an individual while taking medications, or the mood of a patient while receiving treatment play a vital role in developing Nocebo effect. If they are highly anxious and worried individuals then they are slightly more prone to develop the nocebo effect. Hence, our attitude towards medications (injections, cough syrups, etc) can help develop nocebo effect. Therefore, one is advised to focus on the good effects of medicine rather than associating it with the negative symptoms, for example, one should not stop taking cough syrups because of the bad taste instead they should focus on the improvement to their condition due to the cough syrup, concludingly focusing on the positive effects helps to reduce the chances of developing the Nocebo effect.
- 2) **Previous Healthcare Experiences**
- 3) **Media Coverage, Experiences of people Around us :** Media coverage about a medical treatment can influence the development of nocebo effect. According to an article written by ScienceDirect, recently the media has frequently discussed about the COVID-19 vaccine, this vast media coverage increased the adverse effects from the media coverage.
- 4) **Interaction with the Medical Professionals:** Verbal, non- verbal, clinical environment, written communication can all influence development of Nocebo effect. For example, instead of saying “ one out of ten people who take this medication have suffered with headaches” this should be said “ 9 out of 10 people do not experience any headaches”, such reframing of sentences can slightly help to decrease the chances of developing the Nocebo effect, it also helps patients be more relaxed and focused towards improving their health.

Summary

The Nocebo effect is the negative symptoms experienced by a person due to the expectation of the negative side effect even if the medication consumed is a “ placebo pill” or a “ sugar pill”. Although you are free to worry if you experience any side effects of a medicine, pain or side effects due to medication is not all due to the Nocebo effect and it is okay to be concerned about the negative symptoms that you feel after medications.

The Nocebo effect demonstrates how powerful our thoughts can be, and how different research studies have concluded that just by informing someone of the negative effects associated with a pill can result in the development of such negative effects despite the pills being “ placebo” or “dummy pills” with no actual medicinal effects.

Medical Professionals should learn the importance of this effect and rephrase their words in a positive manner so as to avoid increasing the development of nocebo effect. Although this can be very difficult for medical professionals and lead to ethical problems and dealing with a patients feelings, anxiety and discomfort can be as difficult but to ensure the improvement of a patient it is vital to positively rephrase words and combat as well as prevent the intervention of nocebo effect in any medical procedure.

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