Published in final edited form as:

Am J Bioeth. 2017 June ; 17(6): 46–48. doi:10.1080/15265161.2017.1314057.

Tell Me the Truth and I Will Not Be Harmed: Informed Consents and Nocebo Effects

Luana Colloca^{iD}

University of Maryland, Baltimore

The authors of the article entitled “When Respecting Autonomy Is Harmful: A Clinically Useful Approach to the Nocebo Effect” raised the issue of symptoms worsening as a consequence of informing patients about the side effects of the treatment throughout the informed consent process (Fortunato, Wasserman, and Menkes 2017). In particular, the authors suggested considering “nondisclosure in the case when a nocebo effect is likely to occur” with an acceptance that “autonomy vis-à-vis informed consent must be forestalled, but salvage much of its role by elaborating a practical clinical approach to postencounter follow-up” (36). Such an approach has some potential limitations.

First, forestalling the principle of autonomy to promote nonmaleficence has the risk of imposing the traditional paternalistic approach where physicians feel authorized to control the disclosure of information to patients, influencing the decision-making processes without establishing an acceptable therapeutic alliance (Brody and Colloca 2013).

Both laws and medical ethics have endorsed informed consent and narrowly circumscribed the “therapeutic privilege” to withhold information. Physicians have an obligation to convey truthful information to patients so that patients can make informed decisions about their medical care and lifestyle in light of their values and preferences (Colloca and Miller 2011).

Still some patients may prefer to not be informed about side effects. In 2011, we wondered: “Would it be ethical for physicians to inform their patients about the nocebo phenomenon and then ask them if they would prefer not to be informed about potential treatment side effects, such as nausea or headaches, that are psychologically bothersome but do not pose serious risks of harm?” We argued that “A patient’s voluntary waiver of side effect information does not constitute informed consent, but arguably, it can be valid consent that respects autonomy” and concluded that “ethics-related empirical research evaluating this strategy would be needed before it could be considered appropriate in clinical practice” (Miller and Colloca 2011).

Such an authorized concealment is a potential approach for those patients who choose not to know the profile of side effects associated with a specific treatment (Colloca and Miller

Address correspondence to Luana Colloca, MD, PhD, Department of Pain Translational Symptom Science, School of Nursing, University of Maryland, 655 W. Lombard Street Suite 729, Baltimore, MD 21201, USA. colloca@son.umaryland.edu.

ORCID

Luana Colloca <http://orcid.org/0000-0002-6503-4709>

CONFLICTS OF INTEREST

LC received lecture honoraria and has acted as a speaker or consultant to Emmi Solutions.

2011; Miller and Colloca 2011). Patients should be presented with the realm of the nocebo phenomenon and offered the option to agree not to receive information about certain types of side effects. Clearly, the authorized concealment as part of the consent form might be appropriate for relatively mild and transient side effects. By contrast, such an approach cannot be offered in the case of side effects with the potential for serious or irreversible harm and where patients are exposed to damaging risks without having received disclosure of serious risks (e.g., gambling related to dopamine replacement).

Second, it is important to consider that the consent process can be articulated in a way that capitalizes on the optimal clinician–patient communication with an emphasis on framing effects as a tool to minimize nocebo effects (Colloca and Finniss 2012). Clinicians should obtain informed consent and reduce nocebo-like adverse events by paying careful attention to the ways information about side effects is disclosed to patients. The likelihood of side effects can be presented in a variety of qualitative or statistical modalities. Information can be conveyed “negatively” (by focusing on the minority of patients who experience particular side effects) or “positively” (by focusing on the majority of patients who do not experience the side effects) (Colloca and Miller 2011). Different words and terms can shape the impact and perception of a certain event. Framing of a single individual based on the potential identification is a useful approach to convey truthful information about adverse events with an acceptable impact on the risk–benefit profile and the patient decision-making processes.

Third, personalizing the consent process to the need of the single individual on the basis of a potential identification of those patients who are likely to show a nocebo effect is doubtful. Despite the progress made in different fields of medicine unraveling cognitive and noncognitive processes underlying nocebo effects (Benedetti et al. 2007; Colloca and Miller 2011; Blasini et al. 2017), it is clear that vulnerability to the nocebo effect is determined by a variety of factors, including genetic variants, individual nonconscious learning processes, personality, and psychological factors. Moreover, negative expectations are formed through verbal suggestions, prior negative therapeutic experiences and observation of others experiencing a negative outcome, clinicians’ behaviors, and contextual and environmental factors (Blasini et al. 2017). Having an “identikit of the nocebo responder” is far from becoming clinically available. Nocebo effects can generate endogenous neurobiological changes that are not merely related to the consent process. Therefore, in preventing nocebo effects during the consent process, other components of the patient–clinician relationship should be taken into account. We identified distinct contextual and clinical aspects that may be relevant to prevent harmful nocebo effects clinically (Klinger et al. 2017): namely, (1) negative patient–clinician communication and interaction during treatment; (2) emotional burden of patients during treatment and medication information; (3) negative information provided via leaflets; and (4) patient’s lack of positive information. Overall, these aspects are critical in forming nocebo effects.

Clinical strategies to minimize the occurrence of nocebo effects should include avoiding negative phrases when explaining interventions or medical treatment, emphasizing the positive effects of the medical treatment, taking time to allow the patient to ask about previous and actual negative aspects of the medication, and providing adequate time for the patient to internalize the information that has been given. Moreover, potential vulnerable

traits need to be addressed by enabling the patient to relieve emotional burden related to the treatment and any potential side effect. This may require providing the patient with adequate treatments that include psychological assessments and interventions if necessary; encouraging the patient to take medication in positive contexts in order to strengthen the (conditioning) association between the circumstances and positive conditioned effects; avoiding one-sided negative information via leaflets; explaining how the medication acts; and avoiding overestimation of the adverse effects.

Still, we are missing some key pieces of this the puzzle. There is a critical need for educating clinicians and patients about the nature of detrimental effects of nocebo processes, including how, when, and why they happen. It has been shown that patients welcome the possibility of being informed about the placebo phenomenon (Ortiz, Hull, and Colloca 2016). Likewise, educating patients about nocebo effects, the experience of other patients will help understand and contextualize the potential for anxiety and other psychophysiological mechanisms that could lead to the occurrence of unwanted nocebo effects.

In order to achieve this, any core curricula for education of future clinicians should include elements of neurobiology and translational mechanisms of nocebo (and placebo) effects, familiarization with optimal uses of framing effects as part of the patient–clinician communication, and identification of situations in which offering consent forms including the authorization for a concealment of information related to minor side effects and adverse events is appropriate, with the requirement to provide adequate follow-up. Clinicians should learn to explain and educate their patients while eliciting patients' perspectives and expectations so that the information delivery process can be tailored to the needs of the patient.

Rather than jeopardizing the scope and intrinsic value of the informed consent process, we should encourage the promotion of new strategies of conveying information, taking advantage of modern technologies (e.g., Internet, video-based clips, simple vignettes) that can help patients understand and have a thorough knowledge of critical information related to the medication, with a balance between risks and benefits.

Through an understanding of the elements of the consent process, a careful framing of the information, an effort to educate patients and clinicians, many preventive and ethically acceptable clinical actions can be taken in order to reduce nocebo effects and optimize therapeutic outcomes without compromising the patient rights to receive honest information conforming to the truth.

Acknowledgments

FUNDING

This research was supported by the National Institute of Dental and Craniofacial Research (NIDCR, R01DE025946, LC).

References

1. Blasini M, Corsi N, Klinger R, Colloca L. Nocebo and pain: An overview of the psychoneurobiological mechanisms. *PAIN Reports*. 2017; 2(2):e585.
2. Benedetti F, Lanotte M, Lopiano L, Colloca L. When words are painful: Unraveling the mechanisms of the nocebo effect. *Neuroscience*. 2007; 147(2):260–71. [PubMed: 17379417]
3. Brody H, Colloca L. Patient autonomy and provider beneficence are compatible. *Hastings Center Report*. 2013; 43(6):6.
4. Colloca L, Finniss D. Nocebo effects, patient–clinician communication, and therapeutic outcomes. *Journal of the American Medical Association*. 2012; 307(6):567–68. [PubMed: 22318275]
5. Colloca L, Miller FG. The nocebo effect and its relevance for clinical practice. *Psychosomatic Medicine*. 2011; 73(7):598–603. [PubMed: 21862825]
6. Fortunato J, Wasserman J, Menkes DL. When respecting autonomy is harmful: A clinically useful approach to the nocebo effect. *American Journal of Bioethics*. 2017; 17(6):36–42.
7. Klinger R, Blasini M, Schmitz J, Colloca L. Nocebo effects in clinical studies: Hints for pain therapy. *PAIN Reports*. 2017; 2(2):e586.
8. Miller FG, Colloca L. The placebo phenomenon and medical ethics: Rethinking the relationship between informed consent and risk–benefit assessment. *Theoretical Medicine and Bioethics*. 2011; 32(4):229–43. [PubMed: 21479794]
9. Ortiz R, Hull SC, Colloca L. Patient attitudes about the clinical use of placebo: Qualitative perspectives from a telephone survey. *BMJ Open*. 2016; 6(4):e011012.