# Clinical use of placebo treatments may undermine the trust of patients: a response to Gold and Lichtenberg

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## ABSTRACT

There is an obvious need for a critical discussion of the concepts 'placebo' and 'placebo effect'. In a recent paper on the use of placebos in clinical medicine, Gold and Lichtenberg note the conceptual difficulties but use the terminology in a confused way throughout their paper. In our response, we demonstrate these problems with a few examples from their paper.

Gold and Lichtenberg provide an interesting discussion about the use of placebos in clinical medicine.<sup>1</sup> We agree with several of their statements, for example, "We cannot speak of placebo, or of any treatment for that matter, divorced from its psychosocial context" (p. 219). We also appreciate their careful philosophical analysis on deception and autonomy as related to the potential clinical use of placebos.

The authors note the conceptual difficulties related to placebos and placebo effects, and they redefine the essential question without using the term 'placebo': "when is it ethical, in clinical practice, to offer a therapeutic intervention, when the effect, if any, of that intervention is expected to be mediated by psychophysiological mechanisms, such as expectation, relaxation or conditioned response" (p. 220).

Unfortunately, however, the authors ignore the conceptual difficulties and use the terminology in a confused way throughout their paper. Therefore, we wish to point out a few examples of the problems they have with their use of the term 'placebo':

The placebo is arguably the most commonly prescribed drug, across cultures and throughout history. (p. 219)

*Comment*: This statement is grossly misleading. Some treatments have been, and still are, ineffective, but using an ineffective treatment does not mean that the physician is using a placebo. The term 'placebo' implies that the physician knows that the treatment as such is ineffective but uses it anyway. If we find out that a standard treatment was not effective after its use, labelling the treatment a placebo is not justified. Furthermore, claiming that placebos are widely used presupposes the broad umbrella concept 'placebo', which is divided into 'pure placebo' and 'impure placebo', as has been done in several recent research papers.<sup>2–4</sup> The latter concept is problematic and not at all helpful in understanding current or historical practices.<sup>5</sup>

Physicians are reluctant to add even potentially effective placebos to their therapeutic arsenal. (p. 219)

*Comment*: Gold and Lichtenberg do not describe what they mean with a 'potentially effective placebo'. If there is such a category, there should also logically exist 'potentially ineffective placebos', 'actually effective placebos' and 'actually ineffective placebos'. Here the authors forget the crucial importance of context, although they emphasise it in the quotation mentioned in our first paragraph.

The 15-80% of physicians who use placebo treatments ... (p. 223)

Comment: Again, this statement presupposes the concept 'impure placebo', which is a very vague category.<sup>5</sup> <sup>6</sup> For example, according to the recent survey by Howick et al,<sup>2</sup> 97% of GPs had used 'impure placebos' in contrast to 12% of the GPs who had used 'pure placebos' at least once during their career. Only 1% of the respondents reported using 'pure placebos' at least once per week. Thus, the 15-80% mentioned by Gold and Lichtenberg does not refer to the use of 'pure placebos'. According to figures of Howick et al (defined by "at least once in their career"/"at least once per week"), it is not possible to estimate the actual prevalence of the use of pure placebos (ie, how great a proportion of patients has received 'impure' or 'pure placebos'). Furthermore, there is no meaningful interpretation for the result that 97% of the GPs reported using 'impure placebos' since the term covers a large variety of treatments and other activities, from antibiotics for suspected viral infections to vitamins without approved

indications and from positive suggestions to unnecessary referrals.<sup>2 5</sup>

Nevertheless, it is important to mention that, according to an influential 2001 meta-analysis comparing placebo-treatment arms with no treatment, placebos make no clinical difference (ref. 20). (p. 220)

Comment: This statement is false. The abstract of ref. 20 states: "In 27 trials involving the treatment of pain, placebo had a beneficial effect (-0.27; 95% CI -0.40 to -0.15)."<sup>7</sup> Such a particularly narrow (far from null effect) 95% CI implies very strong evidence of an effect on pain in the placebo arms of the trial.

The physicians prescribe placebos ... (p. 219). Administration of placebos ... (p. 223)

Comment: The authors do not describe what they mean by such interventions in practice. Do Gold and Lichtenberg propose that (pure) placebos should be commercially available or that physicians should produce placebo tablets themselves to be given to their own patients? If a physician 'prescribes placebos', what does he or she actually write in the prescription? We agree that, at the office, a physician can select words so that he or she is not caught in a lie or deception. However, what kind of prescription will the patient have in his or her hands when leaving the office? Furthermore, how will the physician respond later if or when the patient finds out that "I am prescribing a pill which research suggests can be of benefit to you..." (p. 221) actually means an inert substance called placebo? Nowadays the patient can rapidly search the internet to find out what the term 'placebo' means even if the term was not familiar earlier.

If physicians start using inert substances to increase the 'placebo effect', and their patients learn about such a practice, the physicians may lose trust, which is an essential part of the doctor-patient relationship, as mentioned also by Gold and Lichtenberg (p. 223). Keeping or losing trust does not depend on a philosophical classification of the statement of the physician as a lie or deception (p. 220). It is the patient who decides whether he or she trusts the physician irrespective of philosophers' opinions outside a particular doctor-patient relationship.

There is an obvious need for a critical discussion of the concepts 'placebo' and 'placebo effect'.<sup>8–11</sup> The preceding examples from the paper by Gold and Lichtenberg are another demonstration of that need.

**Contributors** PL wrote the first draft and HH and RP gave critical comments. All authors approved the final version.

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### Response

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