

REVIEW ARTICLE

Placebo Effects: The Meaning of Care in Medicine by Pekka Louhiala

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Pekka Louhiala crosses disciplines and decades to present a remarkably detailed review of the existing literature on placebos, placebo effects, and related concepts. The problem at hand—and Louhiala does aptly frame it as a problem—is a striking lack of consensus among researchers, scholars, and clinicians regarding virtually all aspects of the placebo topic. In capturing the complexity of this problem, Louhiala expertly compiles an extensive catalog of placebo literature that effectively gives the reader both a map of the territory and a legend to decipher it. He does not, however, give us clear directions to find our way out of the conceptual maze. The focus is often more on the problems than their solutions, which is simultaneously the most notable weakness and the greatest strength of the book.

Louhiala's first aim is to describe the problem as it currently exists and then clarify the conceptual issues related to placebo, before discussing placebo in the clinical context. His aim, supported by the overarching structure of the book, "is to make sense of the concepts and the phenomena behind them."¹ The dedication of an entire chapter to "Clinical Use of Placebos" (Chapter 4) and a final section before the conclusion titled "What Can the Physician Do?" demonstrate Louhiala's interest in connecting conceptual issues to clinical practice.

Louhiala structures his book into three broad sections: first, a review of the problems found in the placebo literature; second, an explication of the predominant confusions that impede placebo research and its application; and third, a discussion of the presence of placebo effects in medicine and the use of placebos in a clinical context.

Untangling the conceptual confusions in the placebo literature is not without risks, and Louhiala often finds himself balancing the need to provide an accurate overview of the literature against the hazards of replicating some of the messiness. His section headings serve as much-needed signposts, but they can also leave readers whiplashed. For example, he takes readers from "But Is There a Placebo Effect After All?" (Section 3.1) to "Body and Mind and Placebo Effects" (Section 3.2), then returns to a coarse-grained exploration of the emergence of placebo effects (Section 3.3) before leaping back to theories on the micro-mechanisms of placebo effects (Section 3.4). I do sympathize with the challenge of structuring the placebo Medusa into neatly arranged sections and a tidy sequence; redundancy and contradiction abound. These are certainly not issues created by Louhiala, and, in fact, he takes pains to highlight these very problems as they manifest in the literature. I wonder, however, if the author's ambition and eagerness to capture the minutiae of the topic contributed to a structure that at times feels puzzlingly non-linear. This is not a criticism so much as it is an acknowledgment of the incredible scope of the work he has undertaken and the ubiquitous conceptual confusions in the placebo literature.

Louhiala covers a remarkable range of literature, from a 1993 study looking at cause of death as related to Chinese American cultural identity and birth year omens in the Chinese tradition to a recent study that showed pet owners' beliefs about veterinary treatments and their effects on their pets' symptom improvement as observed by the owners.² One might question whether these two examples qualify as placebo effects, the latter being an expectancy effect not on the recipient of a placebo but rather on a third-party observer. The former is a more complicated point of debate. Culture does undoubtedly shape perception, cognition, affect regulation, and behaviors in ways that are deeply

entangled with putative placebo mechanisms, such as expectancy. The extreme culturally driven somatization in the example of birth year omens correlating with mortality is mysterious, and it is understandably compelling to attribute it to supraempirical placebo processes. However, labeling physical manifestations of cultural influence as “placebo responses” is a misleading oversimplification, suggesting that placebo can be defined as “belief” and placebo effects can be defined as “the outcome of a belief.” We can appreciate the limitations of this view by considering another example of culturally driven somatization. The bereavement ritual of *olong* in the Sora tribe of Indonesia is enacted by the deceased’s loved ones, facilitated by a shaman.³ In *olong* rituals, the shaman commonly speaks as the deceased and “reproduces their speech habits and gestures with uncanny realism.”⁴ It seems unlikely that researchers and clinicians would classify this somatization—the outcome of the shaman’s belief in their ability to represent the spirit world—as a placebo response. It should be obvious that physical manifestations that arise out of cultural beliefs are not necessarily placeboogenic effects. The key is how to distinguish those that are and those that are not. In the absence of a satisfactory definition of placebo, which is a quandary that extends far beyond Louhiala’s work, it would be useful to delineate key factors in a given example that do or do not align with any presumptive mechanisms of placebo effects that might be at play.

The fact that much of the current literature on placebo research contains terminology that is problematic, as identified by Louhiala and other scholars, leaves him with a methodological challenge. How does one faithfully summarize the literature while avoiding the pervasive use of problematic concepts? In “Conceptual Confusion—An Introduction” (Section 1.3), he rightly questions the widespread use of the term “inert” in placebo definitions and descriptions. He writes, “From a strictly biological view, *no substances* in nature are inert”⁵ and draws from Fabrizio Benedetti who poetically explains, “Placebos are not inert... They are made of words and rituals, symbols, and meanings, and all these elements are active in shaping the patient’s brain.”⁶ In the chapters that follow, however, Louhiala helps himself to the term “inert,” despite its noted inadequacy. It would be unreasonable to expect Louhiala to rework and summarize the vast literature on placebo so that it avoids problematic concepts. However, his use of “inert” undercuts the conceptual warning that he sounded in an earlier chapter. He states, “Meaning response is attached to the prescription of active as well as inert medications and treatments,” utilizing the very term that he suggests we ought to eschew just a few pages earlier.⁷ This is a problem in the placebo conversation as a whole that is not unique to Louhiala: How does one label and refer to the substances in question without using the flawed language that frames the discussion in the first place? Satisfactory alternatives to terms such as “inert” and “nonspecific” have yet to be established, and this further hints at deep conceptual confusions within placebo research and medicine at large.

The language of placebos, placebo effects, and related phenomena does not lend itself to consistency or clarity; Louhiala seems to wrestle with this reality, despite his overt naming of it. As such, one might indeed come away from the reading with a sense that there are currently far more problems than solutions when it comes to studying placebo, assessing studies, and applying the fruits of those discussions clinically. Although Louhiala effectively identifies many of the conceptual problems, the secondary aim of clarifying conceptual confusion is perhaps not as fully realized. In this, Louhiala takes on a formidable task that probably cannot be completed by a single author. His discussions of linguistics are a great strength of the book, second only to the sheer density of the literature synthesis he constructs. For example, analyses of the terms “specific” and “nonspecific” effects surface throughout a number of chapters, with Louhiala generally recommending that we avoid the pair and instead focus pragmatically on measurable or clinical effects. His final point on the topic is well taken: “If an intervention does not have a specific or direct effect, referring to a nonspecific or indirect effect is just another way of saying that the mechanisms of the intervention are not yet known.”⁸ Our ignorance of the underlying processes does not render an intervention any less real or legitimate. Conversely, an incomplete understanding of the mechanisms linking a given pathology and intervention to symptom resolution is not sufficient to indicate the presence of a placebo response. Louhiala proposes a solution amidst the conceptual murkiness by suggesting that we resist the dual temptations of dismissing the

effects of unknown mechanisms as being invalid or medically illegitimate and of labeling unknown mechanisms as placebo.

Regarding the third aim, the discussion of placebos in clinical care ultimately serves as a somewhat narrowed extension of the first two aims rather than as a distinct goal unto itself. Louhiala mostly refrains from making practical clinical recommendations in light of his critical analyses. To the question, “What Can the Physician Do?” (Section 5.2), for instance, subheadings “Ensuring a supportive atmosphere” and “Being positive” offer the clearest answers, drawn largely from published research. Given Louhiala’s expertise in ethics, philosophy of medicine, and pediatric care, readers would likely have welcomed recommendations based on his clinical experience. Perhaps this leaves open the possibility of a follow-up to *Placebo Effects* where Louhiala’s narrative would breathe life into placebo phenomena as they bear out in his practice. He has positioned himself and others well for a deep dive into how one can optimize the placebo responses to improve clinical outcomes.

Placebo Effects reads like an extremely skillful and expansive literature review. It will serve as an invaluable guide to scholars and clinicians interested in placebo-related topics. Louhiala seems aware that each reader must arrive at their own conclusions based on the ample evidence he presents, given the complexity and scope of the topic and the variety of professionals for whom it is relevant. Perhaps he hopes simply to identify and to untangle conceptual confusions in order to facilitate more productive interdisciplinary work. It is an admirable effort to inspire more critical, intentional use of language in the placebo discussion by supplying us with options for an evolving vocabulary. His most direct analyses are seen in the realm of linguistics. For instance, he forcefully argues for the need to abandon terms such as “impure placebo” and “nonspecific effects,” if there is to be meaningful movement toward coherence in the literature. He is equally effective in his criticism of recently proposed replacements for the term at the core of his work: “placebo effects.” Louhiala offers compelling arguments against nearly every such proposal by contemporary scholars. For example, he notes the ambiguous nature of Daniel Moerman and Wayne Jonas’ suggestion of “meaning response.”⁹ Louhiala points out, “[m]ost elements of the practice of medicine are, indeed, meaningful” and the absence of an operational definition for “meaning” weakens the concept.¹⁰

These are additional impressions, not of the content itself but rather of its delivery: Louhiala is fascinated by the depth and breadth of placebo phenomena; is driven by the process of intellectual examination; and desires to engage in a meaningful discussion with others. He seems to be preparing readers to join the dialogue. He steers us firmly in the direction of a more cohesive conversation about placebo but refuses to hand us a script. It is a resounding success by these standards. Readers wanting strict prescriptions and firm conclusions about placebo effects may be left wanting, but they will not find those in any other existing works. Anyone seeking to expand their own understanding of placebo phenomena and critically examine assumptions therein will be satisfied with Louhiala’s comprehensive analysis of the research; he prepares us well to continue exploring. *Placebo Effects* is a useful guide to fellow travelers in the broad territory of meaning and medicine.

Notes

1. Louhiala P. *Placebo Effects: The Meaning of Care in Medicine*. New York: Springer International Publishing; 2020:14.
2. See note 1, Louhiala 2020, at 8, 82.
3. Vitebsky P. Loving and forgetting: Moments of inarticulacy in tribal India. *Journal of the Royal Anthropological Institute* 2008;14(2):243–61.
4. See note 3, Vitebsky 2008, at 247.
5. See note 1, Louhiala 2020, at 14–15.
6. Benedetti F, Carlino E, Pollo A. How placebos change the patient’s brain. *Neuropsychopharmacology: Official Publication of the American College of Neuropsychopharmacology* 2011;36(1):339.
7. See note 1, Louhiala 2020, at 32.

8. See [note 1](#), Louhiala 2020, at 103.
9. Moerman DE, Jonas WB. Deconstructing the placebo effect and finding the meaning response. *Annals of Internal Medicine* 2002;**136**(6):471–6.
10. See [note 1](#), Louhiala 2020, at 32.