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The OPAL Study: Did The Lancet Enable a Jedi Mind Trick?

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Author Comments:	Attached please find our critical reply to the OPAL Study. We also critique The Lancet's approach to publicizing the article.

The OPAL Study: Did The Lancet Enable a Jedi Mind Trick?

In the motion picture epic, Star Wars, Imperial stormtroopers stop Jedi master Obi-Wan Kenobi and his apprentice, Luke Skywalker, with two fugitive droids in plain sight at a checkpoint. Kenobi successfully deceives the stormtroopers with a mind trick, waving his hand and uttering, "These aren't the droids you're looking for," granting the group's safe passage (1). Like Kenobi, the authors of the OPAL Study tell us too broadly that "opioids don't work for acute and neck back pain," applying data from a flawed and limited intervention as their Jedi mind trick (2). Of greater concern, The Lancet has facilitated misapplication of the study's generalizability as part of publicizing its series of articles on low back pain (3).

While we applaud the OPAL's triple-blinded, placebo-controlled, randomized methodology, its authors did not sufficiently emphasize in their interpretation and its subsequent media coverage that they excluded patients with severe spinal pathology, increasing the risk for the study's misapplication in that patient population (2, 4). Moreover, OPAL's intervention did not emulate best or even usual clinical practice for acute pain care, starting with a modified-release combination of oxycodone 5 mg and naloxone 2.5 mg twice daily as a starting point in the intervention group and "titrating" to a maximum oxycodone dose of 20 mg/day (2). Applicable Australian and U.S. clinical guidelines appropriately discourage the use of extended- or modified-release opioids in treating acute pain (5, 6). The study's lower-than-expected compliance rate, which was less than 60%, significantly reduced its statistical power from 0.90 to 0.78, based on a post-hoc analysis of the OPAL study data using a power.t.test function in R calculation (https://www.rdocumentation.org/packages/stats/versions/3.6.2/topics/power.t.test).

Despite these shortcomings, we have greater concerns about the OPAL Study's promotion by The Lancet. This campaign mirrors a similar effort by the journal to publicize back pain research in 2019 (3). Framed as "a call for action" on low back pain, The Lancet sought to reduce healthcare costs by reducing "wrong care" from treating low back pain with opioid therapy using evidenced-based research to influence opioid policy, an unusual course of action for a medical journal (7). It included "a well-planned and thorough media strategy to facilitate promotion of the series," including "a twitter hashtag of the series, #LowBackPain, and a schedule of suggested tweets to be used by authors over the 48 hours before and after the publication of the series (7)." The Lancet also inexplicably published a coordinated, supporting commentary for the OPAL Study's release by two authors who both reported relevant, disqualifying professional and financial conflicts of interest (8). Why would a prestigious medical journal go to such lengths to promote such a flawed research study ?

We believe the answer comes from implementation science, which seeks to influence health policy by disseminating and implementing research based on a presumption that evidence-based recommendations will improve population health (9). The 2016 CDC Guideline for Prescribing Opioids for Chronic Pain exemplifies implementation science, and the OPAL study represents that field's latest addition; both documents seek to reduce opioid prescribing and alter health policy based on interpretations of the evidence affected by their creators' biases about opioid therapy (6, 9). Misapplication of the 2016 CDC Guideline led to unanticipated patient harms, which necessitated its revision with the 2022 CDC Clinical Practice Guideline, intended to better "promote equitable access to effective, informed, individualized, and safe pain management that improves patients' function and quality of life, while clarifying and reducing the risks associated with opioid use (6, 9)." CDC's 2022 revised Guideline embraced a methodical, evidence-based reassessment of implementation science that had been proffered earlier by opioid reductionists (9). Ironically, The Lancet echoed this sentiment in 2021, noting that "the opioid crisis has prompted clinical and regulatory attempts to curb all opioid prescribing, leaving patients feeling angry, abandoned and further stigmatized (10)." In its passion to transform care for acute back pain, The Lancet seems to have forgotten these lessons and its own advice when considering policy changes that would affect opioid prescribing: "The right balance needs to be struck." We call upon The Lancet to demonstrate its good faith understanding that solid science need not depend on Jedi mind tricks and acknowledge the methodological limitations of the OPAL Study.

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