

The “Mad Protocol Syndrome.” 9. A Case of osteoarthritis: The medicalization of joint wear

Jose Luis Turabian

Specialist in Family and Community Medicine.

Independent Researcher/Retired.

Formerly of the Health Center Santa Maria de Benquerencia. Regional Health Service of Castilla la Mancha (SESCAM), Toledo, Spain.

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***Corresponding author:** Jose Luis Turabian, Independent Researcher

Abstract

The “Mad Protocol Syndrome” is a condition in physicians who rigidly or normatively apply clinical guidelines or protocols. This syndrome, understudied but widespread, is seriously dangerous because it generates iatrogenic effects, promotes polypharmacy and drug interactions, is frequently based on controversial, unsound, and rapidly changing foundations due to the rapid emergence of new studies, fails to consider patient-centered care, is not developed collaboratively by medical specialties and patients, is often influenced by powerful interest groups (such as the relationship of almost all panelists on clinical guideline development committees with the pharmaceutical industry), always maintains an exclusively biomedical perspective ignoring broader biopsychosocial viewpoints, and because there are hundreds or thousands (or perhaps millions?) of clinical guidelines that contradict each other in their recommendations. The patient is a biographical, social, and spiritual reality, never an isolated analytical value. No laboratory target (HbA1c, LDL, or blood pressure) justifies destroying a human being's autonomy, lucidity, or daily well-being. "The Mad Protocol Syndrome" ultimately represents the dehumanization of medicine through bureaucracy. To break this absurd cycle of over-prescription and alienation, 21st-century medicine doesn't need to generate more guidelines from distant experts, but rather urgently reclaim the sovereignty of clinical judgment, safe deprescribing tools, and critical methodological approaches that return control to the primary care physician and dignity to the patient. Studying and reflecting on these concepts is the first step toward transforming clinical practice and rescuing the humane, critical, and sensitive medicine that patients so desperately need. Here is an example of clinical guidelines and protocols for osteoarthritis: The medicalization of joint wear and tear (The trap of anti-inflammatories).

Keywords: Guidelines; Methodology; Applicability, Evidence-based medicine; Patient-centered; Personalized medicine, General practice

Introduction

Clinical practice guidelines provide evidence-based recommendations to optimize patient care, while protocols dictate rigid, step-by-step procedures. In general medicine, these tools are designed to reduce practice variation and translate complex scientific research into actionable, patient-specific encounters (1, 2). However, clinical guidelines face significant systemic challenges. Key problems include a one-size-fits-all approach that fails to account for individual

variations, a lack of universal applicability, and potential conflicts of interest. Misuse of guidelines can sometimes lead to suboptimal care (3-5).

The concept we describe as the “Mad Protocol Syndrome” perfectly defines the phenomenon of the tyranny of clinical guidelines or normative biomedical reductionism.

This refers to the growing concern that modern medicine focuses too rigidly on treating isolated biological pathways and rigid, one-size-fits-all algorithms. This severely limits personalized care and ignores the complex, multifaceted realities of human illness (6).

In the scientific and critical medical literature, promoted by movements such as Choosing Wisely, evidence-based medicine without conflicts of interest, and quaternary prevention (7-10), there are blatant examples of guidelines that exhibit these characteristics: medicalization of risk factors, rigid objectives that induce massive polypharmacy in patients with multiple pathologies, a high rate of panelists with conflicts of interest with the pharmaceutical industry, and a complete disconnection from the biopsychosocial model. Below is an example of clinical guidelines and protocols for osteoarthritis: The medicalization of joint wear and tear (The trap of anti-inflammatories)

CLINICAL CASE: The "Mad Protocol Syndrome" applied to osteoarthritis: The medicalization of joint wear and tear

William, 71 years old, with severe bilateral knee osteoarthritis (gonarthrosis). He reports moderate pain that makes it difficult for him to get up from a chair.

The "Mad Protocol" Approach (The trap of anti-inflammatories)

The clinical guideline protocol establishes a stepped analgesic management approach. The physician prescribes 1g of paracetamol every 8 hours combined with 600mg of ibuprofen every 12 hours, based on a continuous schedule and solely on the reported pain level. After four months of continuous treatment with the anti-inflammatory (ibuprofen), William presents to the emergency department with extreme weakness and black stools. He has upper gastrointestinal bleeding due to a bleeding gastroduodenal ulcer induced by NSAIDs. Furthermore, the admission laboratory tests reveal acute renal failure (elevated creatinine) and a hypertensive spike of 175/95 mmHg, destabilizing his cardiovascular health.

DISCUSSION

A purely pharmacological, stepwise approach to joint degeneration (osteoarthritis) pain uses objective visual analogue pain scales (VAS from 0-100 mm) to guide medication escalation, stepping from topical agents and acetaminophen to oral NSAIDs drugs and COX-2 inhibitors, while balancing cardiovascular and gastrointestinal risks (11).

Stepwise Pharmacological Algorithm:

Step 1: Mild Pain (VAS $\leq$ 30 mm) (12): Topical Therapies: Initial approach often includes topical NSAIDs (e.g., diclofenac gel) or capsaicin to minimize systemic side effects. Systemic Analgesics: Acetaminophen is widely used, although its clinical efficacy for severe pain is often limited (13).

Step 2: Moderate Pain (VAS 31-54 mm) (14). Oral NSAIDs: If topicals and analgesics fail, non-selective oral NSAIDs (e.g., ibuprofen, naproxen, or diclofenac) are introduced to manage both pain and underlying joint inflammation (15). Gastroprotection: Due to the risk of NSAID-induced gastrointestinal events, concomitant proton pump inhibitors are frequently co-prescribed for at-risk patients

Step 3: Moderate-to-Severe Pain (VAS $\geq$ 55 mm) (16): COX-2 Inhibitors: For patients requiring anti-inflammatory efficacy but who are at high gastrointestinal risk, COX-2 selective inhibitors (e.g., celecoxib) may be preferred over non-selective NSAIDs. Adjuncts: Short-acting or weak opioids (like tramadol) may be considered when standard NSAID/COX-2 combinations are contraindicated or ineffective (15).

In William's case, the doctor suffers from the "Mad Protocol Syndrome":

1) The continued use of NSAIDs (such as ibuprofen, diclofenac, or naproxen) in middle-aged or elderly patients is one of the greatest sources of preventable medical harm. It causes gastrointestinal bleeding, acute kidney failure, and critically increases the risk of myocardial infarction and stroke by raising blood pressure.

2) Controversial and ineffective bases: Current scientific evidence demonstrates that drugs have extremely modest and decreasing efficacy in the medium term for osteoarthritis, do not halt the disease, and their risks far outweigh their benefits. Pharmacological treatments for osteoarthritis (OA) are primarily symptom-relieving, carry notable systemic risks, and do not halt or reverse disease progression (17).

Because drugs do not alter the structural course of the disease, medical consensus has shifted to emphasize non-pharmacological, evidence-based management. Primary treatments focus on mechanical support and lifestyle modifications to relieve pain, improve function, and slow joint deterioration.

3) Biomedical vs. Biopsychosocial Approach: The traditional protocol focuses on blocking the pain receptor with medication. It completely ignores the fact that the true therapy with solid evidence for osteoarthritis is therapeutic strength training, weight loss, physical therapy, and environmental modifications—strategies that require time, education, and resources that the overburdened healthcare system often fails to provide.

What would a Patient-Centered Intervention Plan look like?

The physician understands that osteoarthritis cannot be cured with pills and that chronic anti-inflammatory drugs are harmful to the kidneys and heart of an elderly person. Therefore, they radically discontinue NSAIDs. They prescribe therapeutic exercise focused on strengthening the quadriceps (physical therapy) to reduce pressure on the knee and recommend weight loss. Pain management is achieved with physical measures (heat/cold) and topical analgesics or paracetamol, strictly as needed if the pain is intolerable. In this strategy, the result is that William improves the stability of his knee thanks to the muscle gained, reduces his pain in a real and lasting way, and keeps his kidneys and digestive system intact.

References

1. Panteli D, Legido-Quigley H, Reichebner C, et al. Clinical Practice Guidelines as a quality strategy. In: Busse R, Klazinga N, Panteli D, et al., editors. Improving healthcare quality in Europe: Characteristics, effectiveness and implementation of different strategies [Internet]. Copenhagen (Denmark): European Observatory on Health Systems and Policies; 2019. (Health Policy Series, No. 53.) 9. <https://www.ncbi.nlm.nih.gov/books/NBK549283/>
2. Conroy M, Shannon W. Clinical guidelines: their implementation in general practice. *Br J Gen Pract.* 1995;45(396):371-5. <https://pubmed.ncbi.nlm.nih.gov/7612343/>
3. Lau EW, Bonnemeier H, Baldauf B. Misuse of Guidelines Could Disadvantage and Harm Patients. *J Evid Based Med.* 2024;17(4):705-707. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11684497/>
4. Dörenkamp S, Mesters I, Teijink J, de Bie R. Difficulties of using single-diseased guidelines to treat patients with multiple diseases. *Front Public Health.* 2015;3:67. <https://pmc.ncbi.nlm.nih.gov/articles/PMC4413518/>
5. Rapezzi C, Lorenzini M. How far should guidelines be followed? *Eur Heart J Suppl.* 2020;22(Suppl L):L121-L123. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7673602/>
6. Cramer H. Whole Health Research Thought Further: How Can We Stay Whole in a Reductionist Paradigm? *J Integr Complement Med.* 2024;30(12):1123-1124. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11659440/>
7. AbdulRaheem Y. Unveiling the Significance and Challenges of Integrating Prevention Levels in Healthcare Practice. *J Prim Care Community Health.* 2023;14:21501319231186500. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10350749/>
8. Wagner H. Quaternary Prevention and the Challenges to Develop a Good Practice Comment on "Quaternary Prevention, an Answer of Family Doctors to Overmedicalization". *Int J Health Policy Manag.* 2015;4(8):557-8. <https://pmc.ncbi.nlm.nih.gov/articles/PMC4529049/>
9. Furlan L, Francesco PD, Costantino G, Montano N. Choosing Wisely in clinical practice: Embracing critical thinking, striving for safer care. *J Intern Med.* 2022;291(4):397-407. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9314697/>
10. Martins C, Godycki-Cwirko M, Heleno B, Brodersen J. Quaternary prevention: reviewing the concept. *Eur J Gen Pract.* 2018;24(1):106-111. <https://pmc.ncbi.nlm.nih.gov/articles/PMC5795741/>
11. Richard MJ, Driban JB, McAlindon TE. Pharmaceutical treatment of osteoarthritis. *Osteoarthritis Cartilage.* 2023;31(4):458-466. <https://pubmed.ncbi.nlm.nih.gov/36414224/>
12. Collins SL, Moore RA, McQuay HJ. The visual analogue pain intensity scale: what is moderate pain in millimetres? *Pain.* 1997;72(1-2):95-7. <https://pubmed.ncbi.nlm.nih.gov/9272792/>
13. Alexander LAM, Ln D, Eg Z, et al. Pharmacological Management of Osteoarthritis With a Focus on Symptomatic Slow-Acting Drugs: Recommendations From Leading Russian Experts. *J Clin Rheumatol.* 2021;27(8):e533-e539. <https://pubmed.ncbi.nlm.nih.gov/32732520/>
14. Malfait AM, Schnitzer TJ. Towards a mechanism-based approach to pain management in osteoarthritis. *Nat Rev Rheumatol.* 2013;9(11):654-64. <https://pmc.ncbi.nlm.nih.gov/articles/PMC4151882/>
15. van Laar M, Pergolizzi JV Jr, Mellinghoff HU, et al. Pain treatment in arthritis-related pain: beyond NSAIDs. *Open Rheumatol J.* 2012;6:320-30. <https://pmc.ncbi.nlm.nih.gov/articles/PMC3527878/>
16. Jensen MP, Chen C, Brugger AM. Interpretation of visual analog scale ratings and change scores: a reanalysis of two clinical trials of postoperative pain. *J Pain.* 2003; 4(7): 407-414. [https://doi.org/10.1016/S1526-5900\(03\)00716-8](https://doi.org/10.1016/S1526-5900(03)00716-8)
17. Li S, Cao P, Chen T, Ding C. Latest insights in disease-modifying osteoarthritis drugs development. *Ther Adv Musculoskelet Dis.* 2023;15:1759720X231169839. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10184265/>

