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Professionalism and moral injury in a capitalist healthcare system

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TRANSLATIONAL SOCIAL SCIENCE:

Professionalism and moral injury in a capitalist healthcare system

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ABSTRACT Professionalism cautions against profit while capitalism exists for profit. This case is a structural analysis of capitalism in a clinical setting that reveals physicians to be simultaneously wage laborers and professionals. Capitalism generates profit. Professionalism views profit as a conflict of interest that erodes trust in the doctor-patient relationship. Managing these conflicting values causes moral injury for physicians, which is a driver of physician burnout.

Keywords: *professionalism, capitalism, pulmonary embolism, embolectomy, thrombolysis, physician burnout, moral injury*

Clinical-Social Context

In an Informed Consent report [published concurrently with this article], Meza, Costello, Moughni and Yee describe the case of a 33-year-old man with a history of factor V Leiden mutation and multiple deep vein thrombi who was evaluated in the Emergency Department for an acute pulmonary embolism in the right distal main and segmental branches along with a possible pulmonary infarct and mild right ventricular strain. He had been previously treated with rivaroxiban and was currently taking apixiban. The Emergency Department physician, the admitting physician, and the in-house resident each made the clinical decision to forego thrombectomy, as the risks of the thrombolysis outweighed the benefits based in part on guidance of the algorithm for treating Pulmonary Emboli published in Up-to-Date. Subsequently, the vascular surgeon referred the patient to interventional radiology. The radiologist reached the opposite clinical decision and recommended the mechanical thrombectomy, documenting a pro forma informed consent process using a generic “dot-phrase” text.[1]

Mr. Turner tolerated the mechanical thrombectomy well. After the procedure, he was seen again by the primary team. When asked if he would have preferred a more conservative approach with heparin, Mr. Turner said “Originally, I did not mind either option, I just wanted to get better. The process was confusing because different doctors were coming in and out of my room telling me different things. The vascular surgeon told me I was going to be on the heparin anyways whether I do the procedure or not and I was okay with doing the procedure. Now, I am happy with the thrombectomy because it significantly improved my breathing and resolved my chest pain. “

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Upon review of the Clinical-Social context, five different physicians made the clinical decision about thrombolysis / embolectomy but none of them discussed either the decision or the rationale for the decision with the others. Only one of the physicians (the interventional radiologist) decided to proceed with mechanical embolectomy using the INARI device. Because of the disjointed communication in the clinical setting among clinicians, the question of preventing Chronic Thromboembolic Pulmonary Hypertension (CTEPH) was never addressed, but the patient wound up with a potentially dangerous procedure based purely on Level 2 Evidence Disease Oriented Evidence.[2]

Who made those clinical decisions? On what basis were the decisions made? Surely this is the scholarly domain of Clinical Decision Science.

This prompted a review of available clinical research which is summarized by Meza, Yee, Costello and Moughani.[1] There is a Grade of Recommendation of B for the use of mechanical embolectomy in intermediate risk pulmonary embolism, based on non-randomized registry analysis of disease-oriented outcomes.[1-6]

When reviewing the published medical research, it was noted that three large community healthcare systems affiliated with the medical school had contributing authors that received cash payments from INARI, including the department of the interventional radiologist who performed the procedure.[7] When this became known, the question of conflict of interest was raised. Device manufacturers employ sales representatives to work with physicians. Thus, the device manufacturers, similar to pharmaceutical representatives, inhabit the professional spaces where medical training occurs.[6] In this case, INARI made cash payments to the radiologist, who ordered a non-indicated mechanical thrombectomy despite multiple previous clinical decisions not to proceed.

This knowledge provoked a social-structural analysis related to clinical decision-making. Structural analyses use social theory to explain observations in [clinical] social settings. The Liaison Committee on Medical Education (LCME) Standard 7.6 defines requirements for "Structural Competence, Cultural Competence, and Health Inequities." Medical Education accreditation requires "structurally competent healthcare."[8] Unlike medicine, the specific theoretical frame is chosen depending on the research question. In this clinical-social context, we wanted to explore the interaction of device manufacturers with clinical decisions by physicians. Capitalism is an appropriate heuristic to accomplish this analysis. We are using "capitalism" merely as a heuristic, aware that controversy and alternative structural analyses are possible. The goal is to understand—not argue.

Statement of Social Science Concept Illustrated in the Clinical Social Context

How do the social theories of professionalism and capitalism interact to influence clinical decision making?

Illustration of Translational Social Science Concept

In 1980, the pre-eminent historian of American Medicine, Paul Starr, wrote:

> New distinctions will need to be made among owning, managing, employed, and independent physicians…Another key issue will be the boundary between medical and business decisions; when both medical and economic considerations are relevant, which will prevail and who will decide?[9]

Embedded within that warning was the theory of capitalism, most famously described by Karl Marx. In this clinical social context, "owning" refers to ownership of the means of production, or capital, "employed" refers to wage labor, and "medical and business decisions" highlights the duality of clinical decisions for patients versus corporate policies structuring services for customers or clients. "Capitalism is not designed to meet human needs; capitalism is designed to generate profit."[10, p. 142] Profit is an inherent feature of capitalism, and while it is neither good nor bad, it does redistribute wealth and risks creating income and wealth inequalities. Alternatively, profit can be used for innovation and improving the healthcare system.

A structural analysis is used to observe and explain social behaviors with social theory, as noted earlier. This case is so striking because a simple structural analysis of the social context reveals physicians to be both wage laborers and professionals. Another

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striking feature of this case is that the clinical decision directly benefitted the device manufacturer and its shareholders. Was the clinical decision to proceed with mechanical embolectomy for the benefit of the patient, the device manufacturer, or both? The clinical research available demonstrates the owners of this new technology are seeking to expand indications to lower-risk disease, changing the risk-of-harm versus risk-of-benefit calculus.

Since the above clinical encounter, we have routinely asked clinicians and doctors, "What is capitalism?" Most giggled nervously, then went silent until, as the interaction progressed, the majority responded with some variation of "capitalism is a market economy," in line with the general social understanding of Adam Smith's *Wealth of Nations*, which describes these economies.[11] Not a single physician accurately identified the social interactions described by the economic theory of capitalism. Capitalism is not the same as an exchange governed by supply and demand as described in *Wealth of Nations*. Responses from these physicians indicate a knowledge gap.

None of the many physicians involved in this cascade of clinical decisions indicated an awareness of functioning within a social structure determined by capitalism, though the LCME demands "structurally competent healthcare." But capitalism as a heuristic suggests that such an awareness is necessary for structural competence in a medical environment where clinical decisions are both medical and business decisions, and clinical decision-makers are both professionals and wage laborers, beholden to both the priorities of the Hippocratic oath and the profit incentive. It seems clinical decision science and structurally competent healthcare have overlapping domains of knowledge.

In many ways this rather odd clinical encounter with the multitude of decisions that affected the patient care is medicine's meeting with destiny as described by Paul Starr in 1980. During the intervening years, physicians have abandoned private practice and currently most are employees of healthcare organizations.[12] This means that doctors have transformed from craftsmen and professionals to wage laborers. That is why Paul Starr gave us the ominous warning, and why this clinical encounter requires physicians to understand the basics of both professionalism and capitalism.

Professionalism

Paul Starr quotes W. J. Reader and S. W. F. Holloway:

> "A profession, sociologists have suggested, is an occupation that regulates itself through systematic, required training and collegial discipline; that has a base in technical, specialized knowledge; and that **has a service rather than profit orientation**, enshrined in its **code of ethics.**"[9] [emphasis added]

The code of ethics for physicians was recently updated to address current practice settings in the document *Medical Professionalism in the New Millennium: A Physician Charter*:[13]

> The principle [primacy of patient welfare] is based on a dedication to serving the interest of the patient. Altruism contributes to the trust that is central to the physician-patient relationship. Market forces, societal pressures, and administrative exigencies must not compromise this principle.
>
> [Conflict of Interest] Such compromises are especially threatening in the pursuit of personal or organizational interactions with **for-profit industries** [emphasis added], including medical equipment manufacturers, insurance companies, and pharmaceutical firms.
>
> Physicians must ensure that patients are completely and honestly informed before the patient has consented to treatment and after treatment has occurred.

Capitalism

Capitalism is an economic theory that governs social interactions— it attempts to explain human interactions in a social setting. There is no pure capitalist society. In the United States there are anti-trust laws, financial regulation, and the Occupational Health and Safety Organization (OHSA), among other institutions and policies, that take the sharp edge off a purely capitalist economic system.

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There are three basic components of capitalism, each interacting with the other:

1. **Capital**—known as the "means of production".
2. **Wage labor**—humans doing work in return for monetary compensation.
3. **Raw materials**—which can take many intermittent forms, but ultimately derive from natural resources and the land.

"These three ingredients—Capital, Wage Labor, and Raw Materials result in a Commodity. A commodity is defined as something that was made through human labor, satisfies the demand, and is produced for the purpose of exchange.[10, p. 28] … But the same process is at work if the end result of the efforts is not a physical, but a social, commodity. The product might not be palpably tangible. It might be care performed on a patient, it might be knowledge conveyed to a student. But these outcomes, too, are the product of human labor. And therefore the value of those outcomes is determined by the labor time necessary to generate them, just as it is for physical commodities."[10, p. 38]

American healthcare as a capitalist system

The economic theory of capitalism explains many of the aspects of this Clinical Social Context.

1. The **means of production [capital]** in the healthcare environment are the hospital beds, operating rooms, intravenous fluids, medications, the electronic health record, and everything a doctor needs to perform the job of being a physician. This is a massive economic investment.
2. For the sake of understanding this Clinical Social Context, we need to adjust our perceptions to understand that in this setting, doctors are **wage laborers**. A significant portion of the wage labor of physicians is in the form of clinical decisions. Physician employees and the product of their labor results in profit for the owners of the means of production, only part of which is returned to the physician as salary or compensation as employed physicians.

   "... the differences between the kind of conditions faced by professors at elite colleges versus those at public universities, or doctors with private practices contrasted those working in emergency rooms, lead to very different levels of control at the workplace.... it has converted the physician, the lawyer, the priest, the poet, the man of science into its paid wage laborers."[10, p. 90]
3. The **raw materials** include goods and services consumed by the healthcare system that provide the tools to produce services. But in a very real way, the other, less obvious raw material healthcare "consumes" are diseased bodies, which through selling healthcare services become more functional, healthier, longer-living human bodies.

Medical device manufacturers (for-profit corporations) are in competition for market share—selling products is the only way to make profit. Innovation makes currently available products obsolete, which explains why investing capital into new mechanical medical devices (or therapies) exemplifies the competitive nature of healthcare. Does the drive to innovate and compete lead to overtreatment, which we know causes poor outcomes?[14-16]

> *…competition is the beating heart of capitalism*.[10, p. 103]

Being aware of the structure of relationships embedded in the economic theory of capitalism helps doctors understand the implicit forces shaping clinical decisions. Understanding the effects of these relationships is vitally important to Clinical Decision Science. Many times, we have heard doctors admit to doing things that are wasteful or improper, saying, "…we have to do it to make money." Sometimes the doctors, who are wage laborers, are speaking on behalf of their employer and sometimes, they are referring directly to their personal wages.[17]

We are taught to look for bias when reading clinical research, but what about bias in making a clinical decision? What does it mean that the device manufacturer in this case paid cash to the physicians testing the device on their patients?

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New Knowledge Related to Clinical Decision Science

Professionalism cautions against profit while capitalism requires profit. Clinical Decision Science exists to explore the competing demands on physicians and heighten awareness regarding the day-to-day decisions made in clinical practice.

This clinical report indicates that asking the correct clinical question is central to Clinical Decision Science. In this case, the attending physician asked, "How do we prevent CTEPH for this patient?" Chronic thromboembolic pulmonary hypertension (CTEPH) is the result of persistent obstruction of the pulmonary arteries by acute or recurrent pulmonary emboli.

There is no clinical research relating prevention of CTEPH to mechanical embolectomy. All we have are proxy measures of disease-oriented evidence in the context of a social structure that played an overriding role in what questions and what decisions were actually addressed in this clinical social context.

This report highlights the inherent tension in being both a professional and a wage laborer, and the effects that dual role has on clinical decision making. This has been the subject of many commentaries and there are claims that profit and capitalism embedded in our healthcare system create moral distress for physicians acting as professionals. "Moral distress is the experience of cognitive-emotional dissonance that arises when one feels compelled to act contrary to one's moral requirements."[18]

> Patients are burned out. Nurses are leaving the profession. Doctors are demoralized. In the meantime, the people not sick or tending to sickness — the corporate middlemen in charge of insurance companies, private hospitals, doctor practices and pharmaceutical companies — are feasting. As Donald Berwick, a former administrator for the Centers for Medicare and Medicaid Services, noted, the "**glorification of profit, salve lucrum, is harming both care and health.**"[19] [emphasis added]

Mark G. Shrine comments further on the causes of burnout:

> Physicians are burnt out because the entire medical system is built on exploiting the ethics that brought them into the field in the first place. It's built on taking advantage of the fact that they don't unionize, don't strike, and don't demand change.[20]

Eyal Press expands on this theme, linking medical professionals and wage laborers:

> …in recent years, despite the esteem associated with their profession, many physicians have found themselves subjected to practices more commonly associated with manual laborers in auto plants and Amazon warehouses, like having their productivity tracked on an hourly basis and being pressured by management to work faster.[17]

And Wendy Dean and Simon G. Talbot, as reported by Eyal Press, elevate the condition of modern medical professionals to "moral injury:"

> Military psychiatrists use the term to describe an emotional wound sustained when, in the course of fulfilling their duties, soldiers witnessed or committed acts — raiding a home, killing a noncombatant — that transgressed their core values… Dean... notes that the term moral injury was originally coined by the psychiatrist Jonathan Shay to describe the wound that forms when a person's sense of what is right is betrayed by leaders in high-stakes situations. "Not only are clinicians feeling betrayed by their leadership," she says, "but when they allow these barriers to get in the way, they are part of the betrayal. They're the instruments of betrayal."[17]

Without the socially acceptable options of unionization or other worker protections, physicians feel trapped in a system with embedded conflicts:

> Continually being caught between the Hippocratic oath, a decade of training, and the realities of making a profit from people at their sickest and most vulnerable is an untenable and unreasonable demand. Routinely experiencing the suffering, anguish, and loss of being unable to deliver the care that patients need is deeply painful. These routine, incessant betrayals of patient care and trust are examples of "death by a thousand cuts."

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> Any one of them, delivered alone, might heal. But repeated on a daily basis, they coalesce into the moral injury of health care.[21]

Treating physician burnout is as bad as treating symptoms without diagnosing the underlying disease, something physicians are taught to avoid. Physicians are burned out because of the moral injury associated with the conflict of professionalism and profit. Diagnosing the social structure in everyday clinical situations with social theory is a form of "Physician, heal thyself."

We believe it is the professional duty of physicians to become aware of the social context in which we make clinical decisions affecting our patients. Further, it is the professional duty of physicians to advocate for changes to the healthcare system. Physicians must avoid a sense of learned helplessness in profit-oriented corporations, and understanding the social science of healthcare will better equip physicians to be advocates for their patients. One method of advocating is for physicians to learn how social sciences inform clinical decisions, a method known in the field as Translational Social Science.

A further response to being both a wage laborer and a professional is political advocacy. Consider the following email received by the authors describing legislative reform prompted by physicians responding to interactions with for-profit health insurance corporations:

> *I was doing some due diligence for [legislative advocacy day] tomorrow and I remember hearing about this bill [Public Act 60 of 2022, reforming the process of prior authorization], turns out it passed and has been signed into law! It addresses many of the concerns you raised and I'd be curious to hear your thoughts on it. It goes into effect June 2023.* [email communication, April 27, 2023]

Talbot and Dean summarize the necessary action:

> What we need is leadership willing to acknowledge the human costs and moral injury of multiple competing allegiances. We need leadership that has the courage to confront and minimize those competing demands. Physicians must be treated with respect, autonomy, and the authority to make rational, safe, evidence-based, and financially responsible decisions.[21]

The time for action is now.

Conflict Of Interest Statement

None of the authors have a conflict of interest to report. All authors take responsibility for the final draft of the manuscript.

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