

Biomedical Ethics

PAIN, SUFFERING, AND THE ETHICS OF PAIN MEDICINE: IS A DEONTIC FOUNDATION SUFFICIENT?

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Abstract. Medicine is a human enterprise dedicated to the goals of restoration of health and the alleviation of suffering. The rising prevalence of pain in chronic illness and the illness of chronic pain (i.e., maldynia) make evident the deficiencies in our current disease-based therapeutic approach. Distinctions in types of pain and suffering are sine qua non to effective and sound pain care. In this essay, we argue that the facts of pain require particular obligations of the practice of pain medicine, and thus discuss deontic foundations of the enterprise that is pain medicine. As well, we address whether a deontic foundation of pain medicine is sufficient to guide the clinical relationship of pain practitioner and patient morally. We posit that while such a deontologic approach can inform the professional obligations and structure of the practice, the practice itself is an interaction between moral agents. The deontic obligation(s) to moral agency are addressed as well as how this approach can support, and is sustained by an agent-based virtue ethics. Last, we address how research and education are vital to inform and sustain the profession and practice of pain medicine, and ways in which these domains can be expanded to enhance the ethical provision of effective care are proposed.

Descriptors. deontology, ethics, maldynia, pain, relationship, suffering, virtue

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INTRODUCTION

Medicine is fundamentally a human enterprise dedicated to the goals of restoration of health and the alleviation of suffering (1-3).¹ Classically its focus is upon persons who are afflicted by disease, rather than disease present

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in a biological entity. However, modern medicine has assumed a more disease-focal orientation, influenced, at least partly, by the effective use of diagnostic and therapeutic technology. This technocentric trend has fostered a mechanical conceptualization of the body and imperatives of objectivity and speed. Yet, while the past one hundred years chronicle the success of the disease-based model of modern medicine in the treatment of acute, often fatal conditions, that model has also created a situation in which the ability to manage disorders longitudinally has resulted in increasing chronicity of disease and resultant illness (4). The disease-based curative ap-

proach, while so frequently successful in identifying and treating disease, is often less than effective, if not completely inept at addressing and treating refractory chronic illness. Persistent pain, as both a symptom of chronic disease and a chronic disease and/or illness itself, is becoming an increasingly evident public health problem; and it is clear that new approaches to treating the chronic pain patient are needed (5).

While technology can and often should be effectively utilized in the treatment of pain, it is important to remember that such care occurs in the context of the human relationship between the clinician and patient. Furthermore, the nature of pain is such that the use of technology alone cannot access the subjective experience of pain and thus fails to provide the clinician with the information necessary to develop and implement sound patient-centered care. Thus, we argue that this relationship remains the critical element of the practice of pain medicine, both as a forum for the inter-subjectivity necessary to apprehending the pain patient and as the focal point through which the inter-personal humanitarian dimensions of pain medicine are enacted.

In this paper, we address the challenge of the patient with durable, intractable pain, briefly describing this condition – maldynia, the illness of pain as suffering (6) – and discussing the necessity of a holistic approach to treating the person with maldynic pain. We argue that the

facts of pain require particular obligations of the practice of pain medicine, and thus we discuss deontic foundations that both describe and establish the obligations of the moral sphere of the enterprise that is pain medicine.² As well, we address whether a deontic foundation of pain medicine is sufficient to morally guide the clinical relationship of pain practitioner and patient. We argue that while such a deontologic approach can inform the professional obligations and structure of the practice, the practice itself is an interaction between moral agents. As such, we address the deontic obligation(s) to moral agency and illustrate how this approach can support, and is sustained by an agent-based virtue ethics. Last, we address how research and education are vital to inform and sustain the profession and practice of pain medicine and propose ways in which these domains can be expanded to enhance the ethical provision of effective care.

THE CHALLENGE OF PAIN AND SUFFERING

Colloquially, pain and suffering are frequently taken to be somewhat synonymous. However, in medicine in general, and specifically in pain medicine, these terms cannot exist as ambiguous concepts, but need to be constructs of reality that establish definable aspects of the personal experience of the patient.³

Pain is a heterogeneous entity; recent nosologic

¹ Throughout this essay, we refer to the discipline of curing, caring, and/or healing patients with pain as “pain medicine”. We use this term to encompass any and all of those practices that profess to treat those persons made vulnerable by pain clinically. While the present discussion focuses upon human medicine, “veterinary pain medicine” is also a viable and relevant term. The deontic foundation of pain medicine is non-specieist and applicable to those individuals who are vulnerable and in our care (e.g., animals).

² Deontic foundations and deontologic basis are used here to refer to an ethical system that is based upon rules and obligations that are presumed to be universal and binding. These terms are not used in the strictly Kantian sense, although much of the basis for deontologic ethics is derived from the writing(s) of Immanuel Kant. For a review of Kantian ethics as applicable to pain medicine, see: Chessa F. *Ethics: history and theory*. In: Boswell MV, and Cole BE, Editors. *Weiner's Pain Management: A Guide for Clinicians*, 7th Edition. Boca Raton, FL: CRC Press, 2005:1355.

³ Even in medicine these terms can be and often are related and overarching, and these distinctions or similarities are important for a knowledge of pain and the pain patient.

classifications have distinguished between nociceptive and various forms of neuropathic pain (7). Nociceptive pain occurs when an identifiable, noxious stimulus activates high-threshold A-delta and/or C sensory fibers, transmitting impulses to the central nervous system, and ultimately to specific networks within the brain. Characteristically, when the noxious stimulus is removed, transmission stops, activation of the system(s) ceases, and (the sensation of) pain ends. This mechanism can be either avoidant (in the acute state) or recuperative (in the chronic state), in that it induces rest and allows recovery from organic insult. Thus, it is physiologically necessary for the normal functioning of the organism, is purposive, and, therefore, can be considered eudynic (8,9).⁴

In contrast, neuropathic pain arises from change(s) in the properties of the peripheral and/or central nervous systems and reflects a disease-process in that the pain system becomes and remains active, despite the absence of a provocative noxious stimulus (9). Neuropathic pain can progress to alter the function and perhaps structure of the nervous system from periphery to brain, affecting not only sensory pathways, but those elements of more expansive neural network(s) that serve the higher functions of cognition, emotion, and behavior (10). As this occurs, neuropathic pain becomes increasingly non-purposive, and its constellation of features is expressed and experienced as illness and suffering; this is maldynia (6). But if maldynia is the illness of pain as suffering, we must ask, *what is suffering?*

Recently, Peter Moskovitz has proposed a putative neurobiology of suffering, describing activation of neural substrates responding to bodily disturbance, affecting brain regions that subserve bodily integrity and evoking reactive responses (11). Eric Cassell (1) has defined suffering as “the state of severe distress associated with events that threaten the intactness of the person”. For Edmund Pellegrino and David Thomasma, suffering is

defined as “a particular patient’s predicament in response to illness” (12), and Daniel Sulmasy describes suffering in somewhat broader, almost transcendent terms as “...an experience of finitude in tension with human dignity”, classifying different types of suffering based on etiology (3; *vide infra*). These definitions describe suffering as biological, experiential, and existential, reflecting (its essence as) a human condition that is subjective and resulting from personal interpretation and assignment of meaning to the neural event(s) of pain and its effect(s).

As Cassell (2) notes, suffering is influenced by patients’ interpretation of its occurrence and etiology; “...when the threat is sufficient, the sick person will believe that his or her intactness as a person is in danger. Suffering ensues at that point. Suffering influences perception by changing the individual’s total focus toward the source of suffering. The entire apparatus of perception, including the assignment of meaning, then contributes to the suffering”.

But while pain and suffering can be related, (and at times this relation may be causal), they are different entities – experientially and perhaps neurally (1,2,11-13) – and distinguishing between them is not simply a philosophical exercise, but is both practically important and ethically essential to the authentic practice of pain medicine. Jansen and Sulmasy (13) claim that neuro-cognitive suffering is a direct, causal, physiologic, mechanical or neurochemical process (see also 11), different from agent-narrative suffering that is belief-dependent, and hold that a principle of proportionality must guide intervention. Surely, suffering can occur in the absence of pain, and pain can occur in the absence of suffering (1,2,11-13). Yet frequently the maldynic pain patient will experience both the neuro-cognitive as well as the agent-narrative suffering as described by Jansen and Sulmasy. Biological, psychological, and social factors of pain contribute to this multi-dimensionality.

⁴ *In that it affords harm avoidance and/or repair, and recuperation.*

While we may “understand” the concepts of pain and suffering in mechanistic terms, a merely objective approach cannot apprehend the patient’s experience of pain, or elucidate its effects and impact. The experiential nature of pain mandates clinical inter-subjectivity, for only then can the clinician fully appreciate how pain has affected the patient-as-person, and the needs that can be met through the provision of care.⁵

THE PATIENT AS PERSON: THE IMPORTANCE OF A HOLISTIC, INTEGRATED APPROACH TO PAIN CARE

When a patient presents to a clinician, signs and symptoms are recorded in a history, the clinician performs a physical exam, and diagnostic tests are conducted to aid in narrowing the differential diagnosis. At this level of interaction, the patient is treated as a generic human body that is grossly identical to any other.⁶ The history, physical exam, and test results, as well as knowledge about the nature of the (suspected) pathology, are ultimately utilized to establish a diagnosis and determine the possible treatments that are available. These are acts of generalization, using theoretical and empirical knowl-

edge to classify and categorize the elemental basis of the pathology that afflicts the patient. But a solely technological, reductive approach to diagnosis (and treatment) characteristically focuses only upon the disease. This deprives patients of much of the “personhood” entailed by the contextual features of psychological and social contributions and relegates them to mere parts and processes (14-16).

However, a patient is not merely a sum of biological parts. Each is an individual existing as a lived body – a person – in the context(s) of his or her experience(s) (17). Thus, any explanation of the phenomenon of maldynic pain requires analysis of both the parts that contribute to the disease process and the whole that embodies the illness of suffering.⁷ It becomes clear that a holistic orientation to both diagnosis and treatment of the maldynic pain patient is necessary. As S. Kay Toombs notes, “...illness must be understood not simply as the physical dysfunction of the mechanistic, biological body but as the disorder of body, self and world (of one’s being-in-the-world)” (18). We maintain that these facts – the uniqueness, complexity, and subjectivity of pain – establish the pragmatic and ethical necessities (*i.e.*, the deontic framework) of pain medicine. But we must also ask if such

⁵ A “medical understanding” of a patient’s pain is by its nature theoretical and based upon an objective knowledge of what pain is and how symptoms and signs reflect particular pain syndromes. Given the subjective nature of pain, it is not possible to “know” or actually “understand” the experience of another person’s pain. The clinician can only understand what the patient explains; therefore, this “understanding” is (in many ways) self-relevant. This reflects the hermeneutic nature of pain medicine, and perhaps medicine more generally.

⁶ The distinctions between the physical body and the embodied person are somewhat abstract and not well conveyed. These ideas are better expressed by the German terms “Körper” (the physical body) and “Leib” (the embodied self, and/or the body as lived), as discussed in the phenomenological literature. For a discussion of the phenomenology of pain, see Leder D. *The Absent Body*. Chicago: University of Chicago Press, 1990.

⁷ Reflecting what has been called the “(Devil’s) circle, or paradox of hermeneutics”, namely that one cannot understand the whole without understanding the parts; but the whole must be understood to comprehend the meaning of the parts. Note also that the hermeneutic paradox establishes that what is understood (in the first person) cannot be explained, and what is explained cannot be understood (by another).

necessities, obligations, and rules are sufficient to account for and guide the moral agency of the clinician.

IS A 'DEONTIC FRAMEWORK' SUFFICIENT TO GUIDE THE PRACTICE OF PAIN MEDICINE?

A deontic framework provides participatory rules that are specifically entailed by the practical structure of pain medicine, that is, what it "seeks and claims to do". By entering into the profession of pain medicine, the clinician is engaged in a specific clinical enterprise that manifests particular obligations to those in his/her care. The pain practitioner must (i) understand the mechanisms, complexity, and realities of pain and appreciate their potential effects upon the person that is the patient, (ii) be inter-subjectively engaged to an appropriate extent with his/her patients so as to gain contextual knowledge, (iii) be knowledgeable and skilled in the most advanced therapeutics applicable within his/her scope of practice, and (iv) employ these techniques in those ways that are in the best interest(s) of his/her patient. These are the "dictates" of pain medicine, as a field. But they are obligations of the most general kind, for the ethical issues arising from the specific circumstances of pain medicine often cannot be reduced to and resolved by a simple set of universalizable rules. This is not to say that a deontic framework of pain medicine is useless or invalid. To the contrary, such a professional deontology objectively defines the moral sphere of pain medicine. It offers descriptions of the *rightness* or *wrongness* of particular actions in terms of their importance and relevance to the structure of the profession (19). It claims that "pain medicine is *x*, and as such, entails obligations *y*" (19). In this way it offers somewhat neutral reasons for particular (practical and moral) actions that are inherent to the general situation(s) of pain medicine. In other words, it imparts that "...by becoming a pain clinician,

Dr. A must (objectively) do (obligatory actions) *b, c, d, etc.*" (19), as established by what the professional structure of pain medicine requires.

DEONTIC OBLIGATIONS TO SELF AND OTHERS: IN SUPPORT OF MORAL AGENCY

It must be borne to mind that pain medicine is a practice and, as defined by MacIntyre, represents a cooperative interaction in pursuit of goods (*i.e.*, acts and ends) that are intrinsic to the relationship between the participatory agents (20). This implies that there are moral, or at least ethical, obligations that are inherent, and must be adhered to within the clinical relationship. We argue that the basis and nature of such obligations and putative rules are established by the nature of the practice and the dimensions of the relationship itself. To be sure, at the most fundamental level, the practice of pain medicine is a relationship between persons, but it is an asymmetrical relationship. The patient is a vulnerable individual who is in need of care (*i.e.*, the object of responsibility), and the clinician has accepted the responsibilities to provide such treatment and care (*i.e.*, to be the subject of responsibility) (21).⁸ However, responsibility is not rendered to merely a body, but to the embodied person, and therefore the clinician must acknowledge and accept the more extensive responsibilities of healing and caring in recognition of (i) pain as both disease and illness, (ii) the humanitarian nature of the practice, (iii) the willing commitment to that practice, and (iv) responsibilities and obligations inherent to such commitment (*i.e.*, its deontic foundation(s)).

Engel (22) and Cassell (1,2) have lamented that modern medicine frequently reduces the patient to parts, and then treats without reference to the person as a whole. Although at times such reductionism may be necessary to conceptualize the pathophysiology of a

⁸ See note 5.

particular process and/or interpret quantitative data, this approach cannot be the sole paradigm for the practice of pain medicine. The clinician must recognize that each encounter with a patient is both unique and personal (23) acknowledging (i) the wholly subjective nature of our experience of self and our relation to others, and that (ii) "...suffering is personal, and medicine as a personal profession – one doctor and one patient, each incomplete without the other... all medical science and technology – rests on that special relationship" (2).⁹ The deontic nature of pain medicine obligates the clinician (i) to accept the profundity of subjectivity, (ii) to accept his/her role as a moral agent, and (iii) to recognize the person in pain as a vulnerable moral patient to whom they are responsible. In other words, the deontic foundation of pain medicine describes the facts and fortifies the values that establish the clinical relationship. This relationship places patient and clinician in community, bonded by a set of mutual moral affirmations and expectations, and reflects the essence of the practice as an interaction between moral agents (24). Thus, it can be seen that this deontic foundation is consistent with and supportive of (if not frankly reliant upon) an agent-based ethics.

The obligations and necessities dictated by the practice of pain medicine in no way lessen the importance of the character of the person who is the pain clinician; and the argument in support of an agent-based virtue ethics of pain medicine has been fully explicated elsewhere (25,26). While a deontic foundation tells us what pain medicine should *do*, agent-based virtue ethics of pain medicine sustain what kind of person (*i.e.*, the moral "who") the pain clinician should *be*. The deontic foundations of pain medicine establish the necessity to recognize (i) the subjectivity of experience, (ii) self and others as moral individuals (agents and patients, respectively), (iii) the need for inter-subjectivity in attempts at inter-personal

understanding, and (iv) the virtues required for moral agency. To regard another person as a moral patient and to accept responsibility (as a clinician) for the care of that person is to acknowledge that such care must be not only technically sound, but must be ethically good (28). Intellectual and moral virtue(s) allow the clinician to utilize distinct types and domains of knowledge to render the right and good treatment(s) for the right reason(s) (27).

CONTEMPORARY PROBLEMS, POSSIBLE SOLUTIONS, AND THE POTENTIAL OF PAIN MEDICINE

Proposing an ethical framework for pain medicine is one thing, implementing and actualizing it is quite another. Pain is a complex, often ineffable problem. Pain patients can be refractory, and the sound execution of care is frequently wrought with potential ethical and medico-legal issues and problems. Clearly, it is a demanding field and in many ways remains somewhat fragmented (26,28). Thus, while numerous disciplines may participate in pain medicine, the field suffers from the lack of a single unifying philosophy upon which guiding, ethical systems can be solidly structured. The persistent use of the disease model to characterize and treat maldynic pain has both fostered particular frustrations and generated ethical issues in the care of such patients. As a result, the maldynic pain patient is frequently marginalized and becomes increasingly isolated from the very care that is both needed and promised by the public, professional assertion(s) of the field.¹⁰ This explicitly affronts and refutes both the deontic foundations of pain medicine as a practice, and the professional affirmations and obligations of the individual pain clinician as a therapeutic and moral agent.

⁹ See also the hermeneutic circle, as described above, as representative of the hermeneutic character of pain medicine.

¹⁰ This marginalization due to the subjectivity of pain and suffering as a personal experience has been instrumental in discussions of the relevance of feminist philosophy and ethics to medicine.

The question then remains, *what can be done to address and potentially solve this problem?* We propose three possible solutions.

First, research is necessary to understand and characterize better not only the pathophysiology of maldynic pain, but also to reveal how these syndromes affect or manifest the experience and phenomena of pain and suffering (29,30). There is little dispute about the need for greater knowledge of the mechanisms of pain, and we strongly endorse such endeavors. Yet inquiry into the experience of pain as illness and suffering is needed if the philosophical basis and ethics of pain medicine are to be fully developed and concretized, and the goal and ends of effective pain care are to be realized.

Second, medical education must institute programs of practical and moral pedagogy. These must focus upon pain more broadly, emphasizing the distinct obligations that are entailed by treating pain and suffering not simply as symptoms, but as disease processes and subjectively-defined illness. Pain medicine must be developed and presented as a distinct specialization, with a discernible knowledge-base and professional responsibilities that reflect both the deontic foundations of the practice, and the individual agency of the practitioner. Such pedagogical incentives cannot be limited, but must enjoin post-graduate (and inter-disciplinary) educational forums to create comprehensive, longitudinal educational programs that enable students and clinicians to apprehend the patient as a complex interactive system, and which establish moral ideals and realities that affect the clinical encounter.

Third, clinical interventions must be developed that are ethically consistent with a contemporary scientific and philosophical understanding of pain and its effects. The medical community as a whole must initiate an

ongoing conversation that articulates the goals of medicine as relevant to the problem and enigma of pain and suffering, sustaining the progress of modern science and the opportunities of new techniques and technologies within an ethically sound framework of care. For it is in this light that the challenges of pain as chronic illness require a reflective and renewed response.

These possible approaches may help to foster a paradigm shift to re-orient and re-personalize pain medicine. One step toward this goal is the establishment of forums for discussion and true exchange of ideas.¹¹ Equipped with expanding knowledge and technology, we are learning more about the brain, mind, and pain. As a community of clinicians, scientists, and educators, we must recognize the obligation to address, appreciate, and care for the patient as a person. Indeed, this is essential to the deontic foundations and agent-based virtue ethics of pain medicine that we espouse. While the structure of the practice may compel particular obligations, it is moral agents who articulate this practice in the clinical encounter. Thus, while the mechanisms and neurophilosophy of pain and the deontic foundations of pain medicine can be provided through didactic education, virtue must not only be taught, but must be inculcated through example and reinforced through practice (31). If pain medicine is to change and improve, rules and obligations may support its structure, but the internal work of the practice must be enacted by individuals who not only revere the potential of pain medicine, but recognize how it is problematic and commit to actualizing its future therapeutic and moral potential.

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¹¹ *This is the purpose of the Pathos Project, an online and interactive enterprise dedicated to bringing students, clinicians, educators and administrators to a common stage to focus upon the problems and potential of contemporary medicine, and instigate foresight to medicine's future. Although still a grassroots project, it has evidenced vigorous participation and considerable growth – both indicative of a sensed need and desire to enact positive change. See: www.pathos-project.org.*

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