ORIGINAL ARTICLE

Medicine through the novel: *Lying Awake*

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Narrative fiction can engage readers in generating imaginative recreations of the inner worlds of doctors and patients, which are largely inaccessible through typical clinical case analysis. Fiction about medicine can yield insight into patients' subjective experience of illness and can highlight the need for an empathetic response from doctors to patients affected by illness. Mark Salzman's novel, *Lying Awake*, invites us to reflect on social, psychological, and spiritual dimensions of neurological illness in particular and of the doctor/patient relationship in general.

on the connection between neurology and spirituality.

SPIRITUAL NEUROLOGY

The protagonist in the novel is a Carmelite nun, Sister John of the Cross. She took on this name after the sixteenth century Spanish mystic and poet, Saint John of the Cross, author of the poem "Dark Night of the Soul". Thirteen years after entering the Carmelite convent, however, her experience is anything but mystical. Her prayers, hymns, and other daily tasks have become arduous and empty of meaning. She finds herself in a spiritual desert: "her heart felt squeezed dry. God thirsted, but she had nothing to offer. The Gregorian melodies, sung without harmony, sounded like dirges. Her arms ached, her back felt sore, and she was hungry. Each hour in choir was a desert to be crossed on her knees. Mirages of peace simmered and beckoned, only to recede as her spirit approached. There was no shade, no shelter, no water" (Salzman,² pp 95–6). This period of "spiritual aridity" leads to "doubts about her vocation" (Salzman,² p 99).

She then begins to have ecstatic mystical experiences that last for three years. One such experience occurs when she is emptying a basin of water into a sink: "The motion of the water as it spiralled toward the basin triggered a spell of vertigo. It was a welcome sensation; she experienced it as rising from within, as if her spirit could no longer be contained by her body" (Salzman,² pp 95). During this period she also spent many hours writing poetry, filling many notebooks, and publishing *Sparrow on a Roof*, a book of essays and poems about contemplative life.

Sister John does not believe that her sensations and impulse to write are illusions or a psychopathology. On the contrary, she believes that they are the natural consequence of her faith and God's response to her prayers. The narrator describes her transformation: "She had languished in the cloister for years, her prayers empty and her soul dry, until grace came and brought the drought to an end" (Salzman,² p 13).

Yet when she is examined for severe migraine headaches and other physical symptoms and is tested with electroencephalography (EEG) and a computerised tomography (CT) scan, the medical diagnosis is that she has a meningioma (a benign tumour of the membrane surrounding the brain) pressing on her temporal lobe. As her neurologist Dr Sheppard explains, her mystical visions and hypergraphia are due to seizures caused by electrical dysfunction in this region of the brain

Abbreviations: CT, computerised tomography; EEG, electroencephalography

The general goals of medicine are to benefit patients and not to harm them, as stated in the codes of ethics of the British Medical Association and the American Medical Association. These include the more specific goal of restoring patients' normal physical and mental functions.¹ Disease alters these functions and often disrupts a patient's sense of self, the conscious experience of persisting through time with unique desires, beliefs, and emotions. Curing or controlling disease through pharmacological or surgical means can restore an affected person's physical and mental functions and thereby repair and restore the self. Yet could a person's self incorporate thoughts produced by a pathological state of body and mind? Could what most of us consider a fractured self caused by a neurological disorder be desirable for a person affected by such a disorder? Do physicians have an obligation only to benefit patients by restoring physical and mental functions to normal levels? Or do they also have an obligation to attempt in all cases the restoration of the patient's self? Ordinarily, realising one goal will result in the realisation of the other. Could these two goals diverge, however, and could a medically successful procedure eradicate a state of mind that a patient wants to have? What really benefits the patient in such a case?

Mark Salzman's novel, *Lying Awake*, raises these and other questions germane to the doctor/patient relationship. It highlights some of the vocational doubts of doctors and especially the inner conflicts of patients who experience neurological illness.² This is significant because neurology is at the core of the biological basis of the self, the seat of the soul. The novel also raises the deeper question of whether the soul and spirituality are reducible to neurology. What distinguishes this novel from other works of literature that examine different dimensions of the doctor/patient relationship is the focus

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triggered by the tumour. The association between this type of religiosity and temporal lobe epilepsy has been well documented, most notably by the American neurologist Norman Geschwind in a series of papers published in the 1960s and 70s.³⁻⁵ More recent research by Swiss neurologist Olaf Blanke suggests that the out-of-body experiences that may accompany the sort of visions Sister John experiences are caused by dysfunction at the junction between the temporal and parietal lobes, as well as in the angular gyrus of the brain.^{6,7} This can disrupt the somatosensory system in the brain that controls our feeling of embodiment and our orientation in space and time. This does not imply that all mystical experience is caused by brain dysfunction. Mystical experience does not always involve hallucinations due to brain dysfunction and may be achieved through such normal mental exercises as prayer and meditation. The fifteenth century English religious writer Margery Kempe, for example, has described the effects of these exercises. Perhaps most influential in this regard has been the writing of the thirteenth/fourteenth century German mystic Meister Eckhart on the nature of the eternal mysteries.

In Sister John's case, however, her mystical experience is caused by brain pathology. This leads to a sense of disillusion since her experience has been the result of a neurological illness rather than a gift of divine grace. She realises that the source of her visions is seizures, and that when neurosurgery cures her of the seizures, her ecstatic visions will end. The narrator captures the nun's inner struggle: "No one agonized more than she over the question of how to tell the difference between genuine spiritual experiences and false ones" (Salzman,² p 121). Confused about the relationship between her neurological health and the state of her soul, she seeks advice from Father Aaron, the priest who regularly says mass at the convent. She asks him, "should I automatically assume that my mystical experiences have been false, or should I stand behind what my heart tells me? Is God asking me to let go of concerns for my health, or is he asking me to let go of my desire for his presence?" (Salzman,² p 124). Faced with the difficult decision of whether to have the surgery that will remove the tumour and with it the source of her visions, Sister John elaborates further on her dilemma: "I can't bear the thought of going back to where I was before. I prayed and scrubbed and went through the motions with no feeling of love, only a will to keep busy. If the surgery were to take my dream away, everything I've gone through up to now would seem meaningless. I wouldn't even be able to draw inspiration from the memory of it" (Salzman,² p 138).

Her reluctance to give up her mystical experience is influenced by Dostoevsky's thoughts about his similar experience during epileptic seizures. She cites the words from Dostoevsky's novel *Demons*⁸ "There are moments... when you feel the presence of the eternal harmony... During these five seconds I live a whole human existence, and for that I would give my whole life and not think that I was paying too dearly..." (Salzman,² p 120). Sister John then asks herself two questions: "If Dostoevsky had been given the option of treatment, she thought, would he have taken it? Should he have?" (Salzman,² p 121).

Sister John identifies with her mystical experience, even though it is caused by an abnormality in her brain. Is the self she wants an authentic one, a self that she would repeatedly choose to have regardless of the consequences? Could she rationally refuse the surgery in order to retain her desired self? Should the obligation of beneficence and non-maleficence of the neurologist treating the nun be influenced by her identification with what he and others would characterise as a pathological self?

Philosophers such as Harry Frankfurt have argued that our selves should be "authentic".⁹ That is, the psychological

properties that constitute our selves should be properties we would choose to have after a long period of reflection and which we would identify as our own. Frankfurt suggests that we would consciously choose to have these properties because doing so would be in our long term rational best interests. This reflective choice is sufficient for a psychological property being legitimately one's own. Presumably, this would rule out psychological properties generated by brain dysfunction that would involve various forms of psychopathology. If these were not the properties that we would repeatedly choose to have, then they would be inauthentic because they would not be our own. Instead, they would be "alien" to us because their source would be something other than normal brain function.

Neuroscientist V S Ramachandran maintains that there are four conditions of selfhood. Each of these conditions correlates with normal neurological functions, and each involves conscious awareness. First, we have a sense of continuity, of persisting through time from the present to the future. Second, we have a sense of coherence or unity. More precisely: "In spite of the diversity of sensory experiences, memories, beliefs and thoughts, you experience yourself as one person, as a unity". Third is a sense of embodiment, an awareness of oneself as anchored to one's body. Fourth is a sense of agency, of free will, the sense of being in control of one's behaviour and one's destiny (*Reith Lectures: The Emerging Mind*, "Lecture 5: Neuroscience—the new philosophy," BBC Radio 4, 30 Apr 2003).

These accounts of what constitutes the self, and of what makes the self authentic, can help us to respond to the questions raised earlier. Although it is a benign tumour, an untreated meningioma would cause more severe seizures and other more serious neurological sequelae as it penetrated the temporal lobe and other brain structures. In addition to the medical concern of the physician treating her, one could argue that the nature and content of Sister John's psychological properties during her mystical visions violate the continuity and unity conditions of normal selfhood. These properties are radically different from those she has when she is not experiencing seizures. Moreover, if these visions included a feeling of disembodiment, then this would also violate the third condition of normal selfhood. Her visions also violate agency, the fourth condition of selfhood, since her actions are governed by these pathological mental states. Sister John is aware of the harm that will befall her without the removal of the tumour. She also realises that refusing surgery could harm others in the convent because "her seizures could become a burden to her Sisters" (Salzman,² p 142). Accordingly, she consents to the surgery. It is a choice, however, that she would prefer not to make, since in either case the consequences are not desirable for her. Nevertheless, the choice she does make would be supported by the realisation that her mystical states are really part of a pathological self, alien to her because they are the result of an abnormality in her brain causing mental states radically different from those she ordinarily has. Having a normal, healthy self requires that one's mental states be generated and sustained by normally functioning brain states.

Even if Sister John believed that the benefits of her mystical experience outweighed any degree of harm from the tumour responsible for that experience, she would not be able to appreciate the visions beyond a certain point. Because seizures overly stimulate excitatory brain circuits, they disrupt the normal activity of neurons, which depends on a delicate balance between excitatory and inhibitory functions of neurons. Seizures are caused by an imbalance of these functions, with too much excitatory and too little inhibitory activity. Refusing to treat the underlying cause of the seizures would only increase their frequency. This would have

deleterious effects on other areas of Sister John's brain, leading to cognitive, affective, and psychomotor deterioration.¹⁰ Eventually she would fall into a coma and die. Indeed, when she first sees the neurologist Dr Sheppard, she already has had several "heart attacks, chronic nausea, and even a three day coma" (Salzman,² p 121).

THE DOCTOR/PATIENT RELATIONSHIP

As her physician, Dr Sheppard has a duty of non-maleficence to Sister John, a duty to prevent harm to her. Thus he would be obligated to try to persuade her that the surgery would be in her long-term best interests. If she refused the surgery, then her physician could override her decision once her condition deteriorated to the point where it compromised her decision-making capacity. Patients under the care of physicians can refuse treatment only if they are competent enough to understand the consequences of foregoing it. At some point, left untreated, Sister John likely would have lost this competence, at which point a decision about treatment would justifiably be made not *by* but *for* her.

In so far as empathising with patients is part of a doctor's obligation to benefit and not harm them, Dr Sheppard is woefully lacking in this regard.¹¹ At the first and second meetings with Sister John, the neurologist treats her in a clinically cold and detached way. When the doctor asks the patient to describe her headaches, his concern is exclusively medical, ignoring the importance of the spiritual dimension of her life and how this influences her interpretation of the experiences that accompany her headaches. She tells him about the "feeling of transcending my body completely. It's a wonderful experience, but it's spiritual, not physical" (Salzman,² p 47). In spite of this, Dr Sheppard continues asking questions about symptoms with a view only to establishing a diagnosis. At the end of their first meeting, Sister John says: "Peace be with you Doctor", (Salzman,² p 148) to which he responds "Have a great day" (Salzman,² p 49). Dr Sheppard should have been more sensitive to the nun's concerns, realising that this particular patient's best interests were not simply medical but spiritual as well. When the CT and EEG confirm that the cause of her seizures is the tumour, "He delivered the information in a brisk, matter of fact tone, as if talking about a third person who was not in the room" (Salzman,² p 68).

Despite telling her that the meningioma can be removed with little risk, and that the prognosis is excellent, Dr Sheppard does not allay her fears or give her much comfort. The point is not that the neurologist should respond to the nun with the same religious language she uses to address him. Rather, he should discuss the medical diagnosis and prognosis with her in a way that is not entirely clinical, but also takes into account her obvious spiritual life and the conflict she feels between mental health and religiosity.

"Even with the doctor sitting with his knees almost touching hers, she felt more alone than she ever had been in her cell" (Salzman,² p 69). For this reason, Sister John does not completely trust and confide in Dr Sheppard. This explains why Sister John also consults Father Aaron and other nuns to help her in making a decision about whether to have the neurosurgery. The priest's response is that Sister John has been focusing too much on herself and not enough on God: "You allowed yourself to think that loving God meant enjoying His company, having ecstasies. It was all about *you*, wasn't it? But loving God is supposed to be all about *Him*. About trusting Him, putting yourself in His hands completely" (Salzman,² p 125). Father Aaron suggests that if she did this, the right decision would become clear to her. Yet while Dr Sheppard's advice is devoid of sensitivity to her spiritual conflict, Father Aaron's advice is devoid of sensitivity to her neuropathology and how this challenges her faith

and vocation. The idea that she should leave everything up to God offers no more of a solution to her dilemma than the medical diagnosis and prognosis. She still feels very much alone. Ultimately, the decision about surgery and particularly its future consequences for her faith is hers alone. "She knew that the real test of faith came when one faced a situation for which there was no human answer" (Salzman,² p 69). The point is not that God could make the decision for her, but rather that there is no obvious "right" decision about what to do. She has to make a decision in the face of uncertainty about what it might mean for her future.

Sister John is forced to make a painful assessment of risks versus benefits in having or forgoing neurosurgery. She concludes that the neurological sequelae of leaving the tumour untreated would be worse than a life without mystical visions. Unlike Dostoevsky, Sister John is not willing to give her whole life to brief moments of spiritual ecstasy. The benefits are not worth the costs. She agrees with the neurologist and consents to undergo the surgery, albeit reluctantly. Although Dr Sheppard is obligated not to harm his patient and to benefit her by restoring her to normal neurological functioning, he does not strictly speaking also have an obligation to restore her normal self. Yet by directly achieving the first goal, he indirectly achieves the second. Preserving or restoring the psychological unity, continuity, persistence, and embodiment that constitute the patient's self is not one of the obvious goals of medicine. This novel shows, however, that restoring a normal self can be a byproduct of and thus consistent with the achievement of clinical medical goals.

Another interesting feature of this novel is an exchange between doctor and patient where they share doubts about their respective vocations. This exchange illustrates a parallel between medicine and religious life.

Sister John: "In religious life...if you lose confidence in your personal experience, it's hard to keep from doubting everything". Dr Sheppard: "That's true for everybody, isn't it? I nearly quit medicine during my first year of residency because I realized that I'd gotten into it for the wrong reasons. But here I still am, and I'm glad that I stuck with it." Sister John: "What kept you going?" Dr Sheppard: (laughing) "Finding out that *everybody* gets into medicine for the wrong reasons. It seems to come with the territory" (Salzman,² p 159).

ENLIGHTENMENT

Unlike her doctor, though, the nun seems unable to resolve her internal conflict. Shifting her attention away from herself toward God as an external source, as Father Aaron and her Superior, Mother Emmanuel, suggest, does not dispel her doubts about her prayers or her vocation. In the end, she tells Mother Emmanuel that she does not feel that she understands God's will. Yet she says: "I'll do my best, Mother" (Salzman,² p 181). In contrast to Saint John of the Cross, it appears that Sister John cannot see light beyond her dark night of the soul and must continue to navigate through it.

Nevertheless, the process of enlightenment through which Sister John has travelled suggests a more positive upshot. She has moved from emptiness to ecstasy to the realisation that her visions were an illusion. This in turn leads to a state of disillusion about the source and nature of her visions and her beliefs about prayer. Yet disillusion opens the possibility of cultivating a different dimension of her self, which generates hope and light at the end of her dark night of the soul. By telling Sister John to focus on an external God, her religious advisors fail to recognise the power of the God within her. This is consistent with the idea from the Gospel of Luke,¹² which says that the "kingdom of God is within you". Sister John can draw upon this inner source to cultivate a life of

compassion. She displays this virtue in her patient listening and advice to Sister Miriam, a nun about to take final vows who also has doubts about her vocation.

What does the idea of cultivating the spiritual source within oneself imply for the question of whether spirituality is reducible to neurology? Although Sister John's visions were caused by brain dysfunction, her disillusion about the source of her visions and the compassion she displays following surgery cannot be explained entirely in terms of neurons. Empathy and compassion depend on normal brain function, but these dispositions have a first person qualitative feel that cannot be accounted for exclusively by physical properties of her brain. Nor can the brain alone account for the ways in which external events influence the nature and content of these mental states. So neither Sister John nor indeed the rest of us need be unduly concerned about the soul being reducible to neurology, as Crick has argued.¹³

CONCLUSION

Lying Awake illustrates how narrative fiction can engage readers in exploring social, psychological, and spiritual dimensions of the doctor/patient relationship, as well as how these dimensions are framed by the goals of medicine. Fiction can accomplish this by generating imaginative recreations of the hopes, doubts, fears, and internal conflicts of doctors and patients, which are largely inaccessible through typical clinical case analysis. Novels about medicine can yield insight into patient's subjective experience of illness and suffering. This can lead doctors who read these novels to develop greater empathy toward patients.¹⁴ Fiction can also lead doctors to reflect on their reasons for practising

medicine, and it can shed light for readers on doctors' aspirations and frustrations in their profession. Salzman's novel can move doctors, medical students, nurses, and patients to reflect on different aspects of neurological illness in particular and the human condition in general.

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REFERENCES

- 1 Jonsen M, Siegler W, Winslade W. *Clinical ethics* [5th ed]. New York: McGraw-Hill, 2001:13.
- 2 Salzman M. *Lying awake*. New York: Vintage Books, 2000.
- 3 Geschwind N, Waxman SG. The interictal behavior syndrome in temporal lobe epilepsy. *Arch Gen Psychiatry* 1975;**32**:1580–6.
- 4 Geschwind N. Behavioral change in temporal lobe epilepsy. *Psychol Med* 1979;**9**:217–19.
- 5 Joseph R. *Neuropsychiatry, neuropsychology, and clinical neuroscience* [2nd ed]. Baltimore: Williams & Wilkins, 1997:chs 8 and 14.
- 6 Blanke O, Ortigue S, Landis T, et al. Stimulating illusory own-body perceptions. *Nature* 2002;**419**:269–70.
- 7 Blanke O, Spinelli L, Landis T, et al. Out-of-body experiences and autoscopia of neurological origin. *Brain* 2004;**127**:243–58.
- 8 Dostoevsky F. *Demons: a novel in three parts* [trans Pevear R and Volokhonsky LJ]. New York: A A Knopf, 1994.
- 9 Frankfurt H. Identification and externality. In: *The importance of what we care about*. New York: Cambridge University Press, 1989:58–68.
- 10 Wiebe S. Surgery for epilepsy. *Lancet* 2003;**362**(suppl):48–9S.
- 11 Halpern J. *From detached concern to empathy: humanizing medical practice*. New York: Oxford University Press, 2001.
- 12 Holy Bible. Luke 17, 21.
- 13 Crick F. *The astonishing hypothesis: the scientific search for the soul*. New York: Scribner's, 1994.
- 14 Beveridge A. Should psychiatrists read fiction? *Br J Psychiatry* 2003;**182**:385–7.

Quotation

"If there be one species of cant more detestable than another, it is that which eulogises what is called the practical man, as contradistinguished from the scientific. If by practical man is meant one who, having a mind well stored with scientific and general information, has his knowledge chastened and his theoretic temerity subdued, by varied experience, nothing can be better; but if, as is commonly meant by the phrase, a practical man means one whose knowledge is only derived from habit or traditional system, such a man has no resource to meet unusual circumstances; such a man has no plasticity; he kills a man according to rule, and consoles himself, like Molière's doctor, by the reflection that a dead man is only a dead man, but a deviation from received practice is an injury to the whole profession."¹

Courtesy of Peter Morrell who supplied this quotation, and to whom we express our thanks.

1. Professor Sir W R Grove, Science and Medical Culture. In, *Appleton's Journal of Popular Literature, Science and Art*, Vol, 1, July 17, 1869, p.p. 503–4.

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