The Inevitability of Pain?

Scargill House

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Must we accept that suffering is inevitable? Must we accept our impotence in the face of pain we are unable to relieve? We who live with the daily reality of the suffering of others have to face these kinds of questions but are usually too preoccupied - or perhaps too afraid of acknowledging the futility of much of our efforts - to give them more than passing thought. We rarely find the opportunity to share them with others; pain meetings are nearly all taken up with propagating more and more amazing discoveries in the science of pain, (and generally rather less amazing discoveries about its treatment,) with little time for reflection or discussion about the things that trouble us most deeply. Rarely do we hear questioned the assumption that understanding the neurobiology of pain holds the golden key to its relief, and that reductionist research holds the key to that understanding. Patients find it difficult to understand why all the wonders of modern scientific investigation and treatment have failed them; are we very much wiser? Can philosophers and theologians help us to understand?

A group of doctors, nurses physio's and psychologists spent three days in the lovely surroundings of Scargill House in Wharfedale exploring these and related issues together. Although expertly guided in the perhaps unfamiliar territories of philosophy and theology, this was very much a meeting for the participants and much more time than usual taken up with free discussion. I have prepared this report partly from scripts provided by the speakers and partly from tapes recorded at the meeting. Of necessity this is not always an exact transcription and involves some degree of summary, interpretation and paraphrase. I have tried to be as faithful as possible as possible to intended meanings and crave forgiveness for any misrepresentation. Some of the discussion has been subsumed into the text of the talk that stimulated it; elsewhere I have reproduced it in a style which I hope may convey something of the way in which we groped together towards some sort of common understanding.

The programme for the first day, entitled “The Questions”, was devoted to short presentations by participants.

The Tao of Pain.

Dr Willy Notcutt, Consultant in Pain Management

There have been huge advances in knowledge about pain and its mechanisms in the last quarter century. Despite this, we are still burdened with the old approach of Western medicine that pain is a target to be located with scanners, bombed with chemicals, stabbed with steel and cauterised with fire and ice. This is obviously true of those of us trying to treat pain by physical means but perhaps even psychologists may sometimes think in terms of targeting patients' problems with their techniques. It is only too apparent that despite the trends in therapy away from physical intervention towards psychological management we frequently fail to help and still don't have all the answers. Most conventional pain meetings are still largely taken up with identifying new targets for our weapons but an aggressive approach to pain frequently fails to make contact with the perceived enemy. Part of the problem is that we are still constrained within our Western model of medicine despite its frequent failure to help us to understand the problems and patients we see in the clinic. We still tend to cling to classical concepts even in our interpretation of advances in understanding of the neurophysiological mechanisms of pain, from the gate theory onwards; and even when these enable us to build bridges between neural processes and what's going on globally , they remain unhelpful if they only serve to encourage a purely mechanistic approach.

So what alternatives to the Western approach are there? Can we learn from Chinese medicine? Traditional Chinese teachings such as the association of acupuncture points via meridians with visceral organs, have been widely derided, but does our new understanding of the integration of the somatic and visceral nervous systems suggest that these should be looked at in a new light? - even if we cannot accept the factual basis of these empirically derived concepts, should they suggest to us that we need to change and widen our perspectives? Should the idea of "restoring internal harmony" have some new resonance for us? After all ,we see clinically that both systems seem to work . Might we then do well to look to the East for a way out of the straightjacket imposed by our Western way of thinking about pain?

In "The Tao of Physics", Frjtjof Capra explored the application of Eastern mysticism to fundamental physics, suggesting that despite their apparent incompatibility' they might simply be two perspectives on the same single reality. He developed six Paradigms of scientific thought with parallels in Taoist teaching, and what follows is an attempt to apply the same approach to pain (and indeed the whole of medicine)

First of all, however, what is Tao? To start with, although religions such as Zen may have partly developed from it, it is not itself a religion and could perhaps be better regarded as a philosophy. It has no "spiritual" aspects, imposes no moral code and generally raises more questions than it provides answers. It eludes exact definition, but can perhaps be best characterised as "the Way of man's co-operation with the course or trend of the natural world", It incorporates concepts such as oneness and wholeness, and "non-action" (as distinct from inaction) . It embraces many paradoxes, ("the union of opposites") regarding the once again as different perspectives on the same reality.

The way in which Tao and the study of pain can be linked can be illustrated by the two statements :

"Tao is both visible and intangible…….yet there are forms and substance in it – subtle and obscure;

there is essence in it." *

"Pain is felt by all but cannot be touched. It cannot be seen or directly measured, but its patterns can be recognised. It is elusive and ill-defined, yet it has substance and specific characteristics"

- Quotations in italics are all from Tao Te Chung

To return, then, to Capra's paradigms:

Paradigm 1

"When you organise, you must of necessity use names and order. But given that, you must also know where to leave off naming and structuring"

Knowledge of Structure does not predict Function

In the classical mechanistic paradigm , the dynamics of a system can be understood from a knowledge of the parts and their laws of interaction. Capra believes however that it is not possible fully to understand the properties of the parts without knowledge of the dynamics of the whole. So it is with pain; knowledge of the intricacies of neuroanatomy is of little worth unless in the context of the function and behaviour of the whole organism – or the whole person. Such partial knowledge may sometimes be adequate in the context of short-lived acute "protective" pain but fails to explain many mysteries, such as the interaction of mind and body, (including such phenomena as the way in which the same stimulus can be intensely pleasurable or intensely unpleasant depending on the context, as with genital stimulation), complex biopsychosocial problems such as low back pain, which destroys the lives of some while others manage very well despite it (and the failure of destroying nerves to cure it), and the catastrophic effects of an apparently minor disturbance of function such as in fibromyalgia. As Pat Wall never tired of saying, you can *learn* everything about neuroanatomy and neurophysiolgy in the laboratory, but you will never *understand* anything about pain unless you go and talk to clinicians.

Paradigm 2

"Clay is moulded into a pot but it is the emptiness inside that makes it useful ……. Therefore existence is what we have but non-existence is what we use"

Process is Primary and determines Structure

In the past it was believed that structures were acted upon by forces to give rise to processes. Capra believes that this is the wrong way round, and every structure that we

observe is a manifestation of an underlying process, as an organism evolves according to how it functions in its environment. So it is with pain: the plastic and structural changes in the nervous system (subserved by the enormously complex network of interacting molecular and cellular events) that accompany pain, and its psychological and social consequences, both result from it and may perpetuate and intensify it. The relationship of cause and effect is subtle and complex, like the distortion of the whole of a spider's web that results from pulling one strand.

Paradigm 3

"What we must do is to see the whole world as our "self" "

The observer is part of the whole system

Heisenberg showed that in the context of quantum physics, there is no such thing as a detached observer: that the very act of observation always changes the thing observed. This is closely paralleled by the relationship of therapist and patient. There is no such thing as detached observation in this situation - the two will always interact in such way as to change both. The therapist who takes an interest and even the one who appears uninterested will both effect change in the patient, and the same applies to his family. Even an apparently objective questionnaire may change the patient's expectations. The "good" doctor's patients will tend to get better quicker while the "bad" uncaring, uncommunicative doctor may have a "reverse placebo" effect.. Some people seem to be more vulnerable to react to the stress of constant exposure to the suffering of others by becoming apparently disinterested and even callous; could it be that this is more likely in those whose relationship with patients is mechanistic and dehumanised, and who fail to benefit from the positive potential of interaction - who miss the "warm glow" of knowing that the empathy between you and the patient has worked. All this works both ways: some patients seem to bring out the best in their carers, and some the worst. Over time, the way we deal with patients is changed by our experience of interaction, for better or worse. (from the audience: It is of course possible for patients to become too attached and dependent – with consequent extra stress on the carer – and it is necessary to find an optimum point of balance in the relationship..... Perhaps the best way of managing stress is learning to find within oneself the *place* where empathy is generated, which involves faith and self-love, (in contrast to looking for an ideal *point* on a "scale" of too much or too little attachment – which may not exist .) Being able to give people enough time is also vitally important in avoiding stress)

Paradigm 4

"Trying to explain it will only exhaust you. It is better to hold onto a paradox"

There are no Fundamental Equations

Physicists have long sought for the fundamental principle upon which the whole understanding of the universe can be based, but so far each new discovery has only undermined or superseded the

old theories. So in pain, we have no theory which will explain everything, and have to learn to live with uncertainty. For example, we have no way of connecting or predicting the intensity of pain associated with any particular injury or condition - something many of our colleagues find difficult to accept, as evidenced for instance by rigid post-operative analgesic regimes.

Paradigm 5

"She who knows that she does not know is the best off; he who pretends to know but doesn't is ill"

All descriptions are approximations.

The older Cartesian paradigms were based on a belief in the certainty of scientific knowledge, but science can never give a complete definitive understanding as it always deals with limited approximate descriptions of reality. We have few means of arriving at an "accurate" diagnosis of the cause of chronic pain, and in complex conditions such as low back pain, virtually none. The limitations of X-rays in this context are well known to all of us but sadly not to all doctors, and very few patients, and the consequences of operating on the assumption that investigations are reliable only too sadly evident. This sort of uncertainty is anathema to our legal colleagues!

Paradigm 6

"Heaven's way is to nourish, not to harm"

"A leader who is advised to rely on the Tao does not enforce his will upon the world by military means
for such things are likely to rebound"

Co-operation, not dominance.

In Capra's final paradigm he proposes a shift away from an attitude of domination and control of nature to one of co-operation and non-violence. Back in the 70's pain relief tended only to mean trying to "dominate" pain by destroying nerves with heat, ice or poison, disregarding the dangers of damaging protective mechanisms We have begun to grow away from this into a more co-operative style, but it might even be wondered whether any of the psychologists' methods might be based on dominance rather than co-operation. Training in pain still seems to be largely oriented towards intervention. We still use the language of dominance: "pain-killers", "nerve blocks" etc. We expect patients to dominate their pain; he who has a "high pain threshold" is a hero but to have a low one means being branded a wimp. Patients expect to be treated with the latest "weapon", and anything less than total "victory" is unacceptable. They (and our colleagues) are in dire need of education, so that they may understand why they have to be content with something less.

Research

How can we move forward? What are the implications of all this for research? Perusal of the journals will confirm that chronic pain is an extremely elusive thing to study (as witness the paucity of Randomised Controlled Trials,) and that it is extremely difficult to tease out single strands from such a complex problem for classical research. This is clearly implied in the first two paradigms; the third one brings up another major problem: how do we quantify the effect of observer/subject interaction? What outcome measures should we be using? - studies of pain management programmes have clearly shown up the difficulties in this area. These questions throw up a huge challenge we are only beginning to face.

Conclusion

What messages can we take home from this meeting about all this? The expression "action through inaction" comes to mind: controlling our urge to do things instead of simply listening and interacting, which may in the long run achieve much more than is immediately apparent. There is great need for

education of ourselves, our colleagues and patients, but first we must get our language right, so we can teach people what pain is and what it is not; that it is intangible and elusive, and perhaps that we must all learn sometimes to accept its inevitability.

Is a reductionist approach to chronic pain appropriate?

What are the implications of theories of consciousness for the study of chronic pain?

Dr Diana Brighouse, Southampton University Hospitals NHS Trust

What are the deficiencies of the biomedical model of chronic pain?
Our understanding of the neurobiological mechanisms involved in chronic pain has increased considerably with the advent of imaging techniques such as functional MRI and single PET scanning, and with the continual discovery by the basic scientists of new neurotransmitters and molecular mechanisms. The biomedical model posits that our understanding of these mechanisms will eventually be complete, and will offer a full explanation of how chronic pain is processed and realised by the brain.

However, as Bonica realised nearly half a century ago, and I quote, "The crucial role of psychological and environmental factors in causing pain in a significant number of patients only recently received attention. As a consequence, there has emerged a sketch plan of pain apparatus with its receptors, conducting fibres, and its standard function which is to be applicable to all circumstances. But ... in so doing medicine has overlooked the fact that the activity of this apparatus is subject to a constantly changing influence of the mind."

Denis Turk, speaking at the world congress on medicine and health last year, discussed the inadequacies of the purely biomedical model to explain chronic pain, and pointed out that the mind and body are inextricably linked - we are moving away from the dominance of Cartesian dualism in western medicine. Turk's view is that neither the mind nor the brain alone can explain the subjective experience of pain and suffering - an adequate explanation must involve interaction between the two.
This leads me to consider further aspects of dualism, and I make no apology for this since I believe that dualism lies at the heart of many of the problems that we encounter in practicing in the field of chronic pain.

Language is a huge problem in this area of study. Jennifer Hansen, a philosopher at the state university of New York, has written an elegant essay entitled "Chronic pain's challenge to western medicine: towards understanding those who suffer." She offers an analysis of Cartesian dualism, and early in her essay she writes
'The task of defining chronic pain proves daunting as long as it remains a task from within a cultural lens that perceives the body as distinct and opposed to the mind. Analogous to the tendency in medicine to relegate chronic pain to mental pathology, the forbidding task of describing pain without reference to metaphor or screams illustrates how Cartesian dualism prefigures our encounters with one another.'

The philosopher John Searle has pointed out that even in trying to reject Cartesian dualism we may implicitly accept it, because we use the language of dualism. I quote:
'In denying the dualist's claim that there are two kinds of substance in the world or in denying the property dualist's claim that there are two kinds of properties in the world, materialism inadvertently accepts the terms in which Descartes set the debate. It accepts, in short, the idea that the vocabulary of the mental and physical, of material and immaterial, is perfectly adequate as it stands.'

The problems of describing pain, and its subjective nature, lead into the dualistic trap of thinking that pain is 'in the mind'. Philosopher Elaine Scarry discusses this clearly:

'the perception of pain arises from our interior state of consciousness. Other perceptions arising from our interior consciousness relate to something in the external world - thus we have fear of x, hunger for y, desire for z - but we do not have pain 'of' or 'for' any external object. Pain is objectless and as such cannot easily be objectified in any form, either material or verbal.'
Scarry's work has been elaborated by others. Sheridan highlights the problems that relate to the similarities and differences between pain perception and mental health disorders:
'A major definitional problem is posed by the subjective nature of pain. Unlike other products of the senses, pain does not necessarily come from or reflect the outside world and this causes many of its problems. When other products of the senses have no external referents we call them hallucinations. Yet pain is not the product of a disordered mind. Pain can be 'in' one's leg; the stimulus might or might not be there, and the pain is registered in the spinal cord and synchronized by the brain.'

Hansen's essay develops with a powerful critique of the hidden dualistic traps inherent in pain management programmes. Stoic dualism posits a radical split between mind and body, with the former always possessing power over the latter - thus the mind in effect creates and potentially uncreates the body's pain. A behavioural approach to chronic pain, as used in pain management programmes, puts the patient in a catch 22 situation. By focussing on pain beliefs and pain behaviours, and working on changing these, patients may successfully deal with their chronic pain. They combat pain by accepting that their mental attitude has to change. This forces the patient into a model that suggests that to some extent the pain is 'in the head' or 'in the mind' - and that no matter how real and legitimate the pain practitioner states their pain to be the mind-body split is encouraged. The language used indicates that patients no longer view their problems as 'real' in the sense of an organic problem needing purely medical treatment. Hansen goes on:
'Thus the western biomedical model, which deals primarily with the body as separate from one's emotional, spiritual or intersubjective life, still reigns as the legitimizer of illness and one's right to suffer. Even in an attempt to think outside this Cartesian medical model, the medical community reasserts its hegemony by shifting to the patient a responsibility to treat her illness.'

Where does this leave the biomedical model, the biopsychosocial model, reductionist theory and theories of consciousness?
Does rejection of dualism imply acceptance of reductionism? Many would argue that it does - John Searle amongst them. He claims that mental phenomena are all caused by neurophysiological processes in the brain and are themselves features of the brain. Hence he is reductionist in his approach - ultimately there must, according to this view, be some part of the nervous system corresponding to a particular set of beliefs or perceptions. There can be no distinction between 'real' or 'organic' pain and 'functional' or 'psychological' pain as measurable changes are demonstrated in parts of the brain that are now accessible to investigatory techniques such as PET scanning.

This brings us to consideration of consciousness. I think we would all agree that pain is a function of consciousness - one may demonstrate reflex responses suggestive of pain whilst unconscious (such as in the patient who is 'light' during anaesthesia) but one has to be conscious to express perception of pain.

Consciousness studies are underpinned by one fundamental question -
'Is conscious experience scientifically explainable - ie can we account for the existence of conscious experience within the scientific framework? Is it possible to construct a causal chain that leads from the building blocks of matter and the forces that act between them, all the way up to experience?'

The reductionist will of course answer 'yes'. Francis Crick has been quoted in this context:
'You, your joys and sorrows, your memories and your ambitions, your sense of personal identity and free will, are in fact no more than the behaviour of a vast assembly of nerve cells and their associated molecules.'
John Searle holds essentially the same view:
'Conscious states are caused by lower level neurobiological processes in the brain and are themselves higher features of the brain. ... The smell of the flower, the sound of the symphony (and we could well add in here 'the perception and experience of pain') are all caused by lower level biological processes in the brain, and as far as we know the crucial functional elements are neurons and synapses.'

This reductive model of consciousness is entirely non-dualistic. Is it possible to reject this model without reverting to the dualism of Descartes and the Stoics? This question brings us to the concept of 'the explanatory gap.'
Block and Stalnaker discuss the explanatory gap in detail in a paper in The Philosophical Review. They point out that even if we assume that consciousness is identical to a property of the brain, that identity itself needs explaining. Now reductionists may argue that this is merely an explanatory gap caused by a deficiency of knowledge, and that as we learn more and more about the basic molecular science involved in neurophysiology we will be able to fully explain these concepts and the explanatory gap will be closed. The opposing view invokes metaphysical dualism - consciousness is neither identical with, nor supervenient on, the physical. It is functionally un-analysable.

David Chalmers quotes a thought experiment designed by Australian philosopher Frank Jackson. Suppose that Mary is a neuroscientist living in the 23rd century. She is the world expert on the brain processes responsible for colour vision. She knows everything there is to know about the physical processes in the brain - how the brain discriminates stimuli, integrates information, produces verbal reports. She understands which colours correspond with which wavelengths on the light spectrum. However, she lives in an entirely black-and-white world and has never seen any colour. With all her knowledge she cannot deduce what it is like to experience the colour red from the physical facts about brain, light and colour functioning.
This does not deny that consciousness arises from the brain, nor that subjective experience emerges from physical process - what is not explained, nor explicable according to those who believe that the explanatory gap is unclosable, is the link between subjective experience and physical process.

Chalmers talks about the 'easy' and 'hard' problems of understanding consciousness, and believes that the reductionists only address the easy problems. This is how he describes the hard problem:
'Once neurobiology specifies appropriate neural mechanisms, showing how the functions are performed, the easy problems are solved. The hard problem of consciousness, in contrast, goes beyond problems about how functions are performed. Even if every behavioural and cognitive function related to consciousness were explained, there would still remain a further mystery: Why is the performance of these functions accompanied by conscious experience? It is this additional conundrum that makes the hard problem hard.'

Chalmers proposes a neat solution to the hard problem of consciousness - a convenient bridge to cross the explanatory gap. He suggests that conscious experience is a fundamental experience that cannot be reduced to anything more basic. He points out that there are precedents for other irreducible entities, such as mass and charge in physics. He goes on to say that there are detailed theories in physics that relate these entities to one another in terms of fundamental laws, and these features and laws explain many complex and subtle phenomena. Drawing on this example, Chalmers proposes that if conscious experience is considered a fundamental, irreducible feature, then there must be fundamental laws associated with it. I quote:
'Where there is a fundamental property, there are fundamental laws. In this case the laws must relate experience to elements of physical theory. These laws will almost certainly not interfere with those of the physical world; it seems that the latter form a closed system in their own right. Rather the laws will serve as a bridge that will cross the explanatory gap. Thus, a complete theory will have two components: physical laws, telling us about the behaviour of physical systems from the infinitesimal to the cosmological, and what we might call psychophysical laws, telling us how some of those systems are associated with conscious experience. These two components will constitute a true theory of everything.'

Is this position dualist? Chalmers describes it as naturalistic dualism: he says
'this position qualifies as a variety of dualism, as it postulates basic properties over and above the properties invoked by physics. But it is an innocent version of dualism, entirely compatible with the scientific view of the world. Nothing in this approach contradicts anything in physical theory; we simply need to add further bridging principles to explain how experience arises from physical processes. There is nothing particularly spiritual or mystical about this theory - its overall shape is like that of a physical theory, with a few fundamental entities connected by fundamental laws. ...The overall structure of this position is entirely naturalistic, allowing that ultimately the universe comes down to a network of basic entities obeying simple laws, and allowing that ultimately there may be a theory of consciousness cast in terms of such laws.'

Where does all this leave us with regard to our clinical practice? Interestingly, although much of the work that I have discussed has been carried out during the past five years, a paper was published by Stanton Peele in American Psychologist 20 years ago that offers pertinent comment on these issues. I quote:
'the appeal of reductionist thinking lies in its concreteness and its conciseness. It organises behaviour into exact, discrete categories; by drawing physical connections between behaviour and the nervous system, it offers compact causal explanations; finally, and most important to its appeal, reductionist thought holds out the promise of clearcut remedies to problems that otherwise seem painfully beyond solution.'

Chalmers' theories do not hold out the promise of clearcut remedies - indeed, they induce further contortions in my thinking as my brain grapples with the complex solutions that he proposes!
I think, however, that I can begin to get my head around a way in which Chalmers' theories could be applied to chronic pain practice - and in so doing integrate practitioners at both ends of the spectrum of approaches to the pain patient. At one end of the spectrum is the pain clinician who believes that ultimately everything is explicable in neurobiological terms (once we've discovered all the neurotransmitters and so on involved in pain pathways) - and that therefore every chronic pain condition will be treatable with the appropriate drug or injection. At the other end of the spectrum is the pain clinician who implicitly accepts Cartesian dualism by invoking 'the talking therapies' and behavioural techniques as the way to manage chronic pain. Of course this is a crude caricature of the real situation, but it illustrates my point. According to Chalmers I am correct in placing my stereotypical clinicians at opposite ends of a continuum - implying that there can be a theory that encompasses both seemingly incompatible views.

Can we apply reductionist theory to chronic pain? I would say no. But adopting Chalmers' proposals allows us to construct an explanatory bridge. The experience of pain, inextricably bound up in the experience of consciousness, can be regarded as an irreducible fundamental, governed by fundamental psychophysical laws that have yet to be elucidated. Chronic pain will, I believe, never be reducible to neurobiological explanation, but instead I would agree with Chalmers that the neurobiology of chronic pain, governed by physical laws, stands alongside the experience of chronic pain, governed by psychophysical laws. The two are complementary but separate. The explanatory gap remains between the two, but with a bridge.

Reductionism is an appropriate paradigm for the study of Pain.

Peter Brook, SPR in anaesthesia and pain management.

Historical background:

In the earliest Greek writings the gods disposed all things, and since they were unknowable and unpredictable, nothing could be predicted and everything was random. This was gradually displaced by the concept of the gods as rational beings, and the world, which they ruled as something which could be understood. Aristotle and Plato developed a teleological view whereby phenomena were explained by the purpose they served, e.g. it rains because plants need it, and were less concerned with immediate causes and mechanisms. The dawn of scientific thinking as we know it today came with Grossteste in the 13th century that first used observation as his starting point, and taught that only reasoning from this could lead to understanding. The first glimmerings of a reductionist approach came with William of Occam and his famous "razor": that there can be no deeper or more adequate an explanation for a phenomenon than the simplest and most minimal, since the search for complex explanations would only lead to an infinite number, with no way of choosing between them. As the scientific revolution flowered in the 16th century with Galileo and his development of the experimental method, and Bacon, who not only made science available to many but was a major advocate of the inductive method. Descarte founded a style of scientific thinking which was to dominate for nearly 400 years and has only recently been displaced. His starting point was that the world was basically

simple, and a simple explanation the basis of understanding. From this he developed the method of analysis: the search for understanding complex phenomena and systems by breaking them down into their constituent parts - what has come to be known as reductionism. Unfortunately he is perhaps better known for the position he was forced into by Papal disapproval of the idea that mind could be understood other than by faith: the separation of a mind not susceptible to analysis from the body - the dualism which (often misinterpreted) has bedevilled medical thinking about pain to this day. Newton's search by scientific method for laws of the universe ordained by God and therefore irrefutable and independent of human thought and experience awaited serious challenge until Einstein demonstrated the inadequacies of Newtonian physics, and Popper suggested that knowledge can only be temporary - that the best explanation at any given time is all we have, and there can be no laws set in stone.

It is then in this tradition that we come to try to understand pain - can we understand it if we can understand mind and consciousness, and can mind and consciousness be understood by reductionist analysis? Chalmers has argued for an unbridgeable explanatory gap - that there are some things that never can and never will be understood. He admits that there are easy problems: phenomena such as our ability to move or hear, which can readily be explained reductively, but maintains that there remain hard problems of experience which are non-reducible. Dennet has challenged this view, arguing that Chalmers and his adherents would have to come up with some sort of quasi-physical force to account for consciousness if they reject a biological model. He postulates a "global neuronal workspace" model in which many modular neuronal networks are active in parallel all the time in the brain, with attentional (and presumably selective) amplification of these leading to awareness. Many neurones throughout the brain are engaged in coherent activity, and information is subjected to a variety of processes; all this global availability is then subjectively experienced as a conscious state (note: they do not "cause" consciousness - they "are" consciousness). Chalmers' "hard problems" are thus no more than theorist's illusions: no "fundamental entity" is required, nor any special "medium of representation". The brain is seen as "democratic" or "anarchic" but no "Cartesian Theatre" exists within it. Searle has taken these ideas further: he doesn't lay claim to being a reductionist but his theories can perhaps be best understood by a reductionist approach. He suggests that consciousness is no more than the neurobiological correlate of neurophysiological events, and that there is no conflict between the two statements: neurobiological processes are the cause of consciousness, and consciousness is a feature of neurobiological processes. He illustrates this by looking at water, the "wetness" of which is not explained by postulating some special "wet" molecules (and other "freezing" ones); all the properties of water are the product of the way water molecules in general behave. Likewise in the brain, there are no specific neurones, which are responsible for the concept of "granny"; it is, rather, the way in which the system works as a whole, which results in any experience. Searle maintains that social facts without a "physical" basis are just as "real" as the physical acts which science tries to explain. Neurobiological mechanisms are to be elucidated by scientific investigation, not by philosophical theorising. The construction of social reality, which includes concepts such as "mummy" and "football" which we all accept to exist, may not involve the examination of hard physical things, nevertheless deals with real entities, which are susceptible to explanation. We all live in one world with many aspects; physical, conscious and experiential, which are all part of a world we should be able to explain without recourse to quasi-physical forces. There remains the problem of our inevitable subjectivity when thinking about this sort of thing. Science should be able to come up with explanations of consciousness and pain, but this requires objectivity: scientific investigation must needs be epistemically objective, i.e. something that comes from us, and involves our point of view, but its subject is normally ontologically objective, i.e. something that exists independently of human thought, like an atom. In investigating consciousness, however, we are examining an ontologically subjective reality, i.e. something that only has reality because we are participating in it.

In sum, it is argued that reductionism is not only appropriate but also necessary for an objective

search for meaning in consciousness and pain.

Discussion:

Please explain again Chalmers' attitude to dualism

He accepts reductionist explanation of nb processes but maintains that there is still a gap between these and conscious experience. Pain experience is a "irreducible entity", but discovery of psychophysical laws may bridge this gap, so this is not Cartesian dualism.

But the cliical consequence of this is that Sione [a clinical psychologist] is going on doing as she is for the moment

Presumably the neurobiological processes are the same for everybody but the experience is different for everybody - how do we bridge that gap?

If you accept the global neuronal workspace theory, you don't need a bridge. Lots of things are going on in the brain you're not paying attention to (e.g. no pain when leg blown off in battle) - consciousness is attentional.

Bridges etc are just models, we mustn't confuse these with "reality"

Mary Midgley, the philosopher, who chaired the later discussion session, offered to present the following précis of the arguments about dualism rather than spending too much of the time available lost in a maze of metaphysics.*

Why is dualism a nuisance to pain therapists and psychiatrists etc? A strong belief has been around for the last 100 years that mind can't effect body but body can effect mind; a curious one-way causality,. Why is this dotty?

Crick is very keen on it & thinks he invented it, but it was actually Huxley who did, likening the body to a steam engine starting and blowing a whistle, which is consciousness. The engine with its cogs etc works perfectly well on its own but its effect is sending up the steam whistle; it would obviously be a mistake to assume that the whistle started the engine, so mind (the whistle) can't drive the engine (the body). This can't be right - it would amount to saying that when Crick is writing a book, one would suppose that he thinks and therefore his hands move; but on his view his hands move and as a consequence his neurones send to his mind the *illusion* that he is thinking - it really is as silly as that.

Descarte was *not* forced into dualism by the Pope; rather he made the amazing discovery of the importance of the subjective, experiencing, first person, point of view, and that our thinking carries on at that point: "I think, therefore I am" - an insight that has re-emerged in the last 20 years with consciousness studies - but was very hard to fit together with the objective story about what is going on "out there". Descartes said there was no direct connection, but God holds these things together. The difficulty remained and people after him kept trying to reduce the two sides into each other and trying to explain one in terms of the other - e.g. trying to explain mind in terms of matter. It is really all a question of what you mean by explain: when you ask for an explanation you want the answers to a particular set of questions and you can't give answers to these by answering a different set. So for instance an explanation of physical things about consciousness very often isn't the one we want.

* *When I suggested reductionism as a topic for discussion, I was thinking rather more of physiology and therapeutics than metaphysics; but it might be argued that in the context of pain the boundaries between these seem a bit blurred. PBW-G*

Two images may serve to show how two sorts of explanations can exist side by side without problems. First the world maps at the beginning of an atlas - there are many of them but they don't represent many different worlds: rather they answer different questions - physical, political etc - about one world; the political map doesn't provide a provisional explanation about the whole world but only answers one set of questions. The London Underground map is a beautifully neat, idealised representation of the real thing, but doesn't suggest that London could be straightened out to fit it. Physics is likewise beautifully neat and abstract, and asks questions with beautifully neat answers. Some biologists seem to think the world and all other sciences should be reduced to physics - that under everything there is an underground map which is neat and straight - but physicists have stopped saying this because they know they haven't got the final answers.

Secondly, the images of a big aquarium with lots of little windows all round it. There can't be one right window which will tell us every thing about the fishes and their behaviour; we have to move around from one window to another and ask other people what they have seen, and try to put together all the different aspects of what is going on in there.

Thus it is with understanding and managing pain; we can't make do with one or other explanation, we must have both.

The Journey from " I '' to "Me."

Father Andy Graydon, hospital chaplain.

How do we react when we are asked to describe ourselves, or what adjective best describes us? When we observe ourselves, who is observing what?

This can be characterised as *I* observing *ME:* the I which is at our absolute centre - unfathomable, essentially indefinable and impregnable to outside or even inside influences, observing the ME which is how we perceive ourselves and how we perceive others to perceive us, and how we define ourselves, as in "I am a doctor," or "I am a caring (absent - minded, sensitive, artistic etc) person". Potential dangers arise when we equate and confuse I with ME: for instance if we make ME our whole identity, when we retire we may lose identity or even meaning in our lives; another arises when we define ourselves by our mood or physical condition, as in "I *am* a depressive" (rather than "I am *experiencing* depression") ,or "I am a back pain sufferer"; yet another when we build our self-image on what we think other people expect of us.

We can help people in pain to learn to detach themselves from and observe the ME in pain as being outside the impregnable I - remembering that a small boat in stormy waters will only sink if the water is allowed in - and thus tap into a strength that brings a new power of healing into play.

It was admitted, in discussion which centred round things that give our lives structure including social factors which we cannot avoid (work environment, marriage etc), that life must inevitably be complicated and change difficult; in particular we often face the difficulty

of changing patients' expectations (such as the unspoken wish for the doctor to "take my body away and give it back when you've fixed it"). In practice we face the practical problem of too many patients, few of whom will have begun to learn to analyse themselves and their problems and too little time; the temptation is great to offer the "quick fix" of a procedure that will bring temporary relief, even if this may be only be putting off the eventual necessity of helping them to live with their pain.

Joe Bloggs, the Noble Individual

Sione Davies, clinical psychologist.

Can acceptance of pain lead to return to a free and creative life, and personal and spiritual growth: does everyone have this potential or only a few noble individuals? Is it our task to guide people on the path to acceptance?

Take Joe Bloggs, who is a 30yr-old ex-postman who has had back pain for the last three years following an RTA. Two years ago he lost his job due to his pain and his wife works full-time to support the family. He is unable to fulfil his role as husband, father and provider, and feels emasculated and impotent. His exclusive focus is on his pain and he expends all of what little energy he has seeking out investigations and treatments he hopes may lead to a cure for it, but is otherwise largely inactive, tense and irritable - the result of a classic negative vicious circle. Above all, he refuses to accept his pain. But does it have to be like this? Now see Joe three years on: with help, he now sees himself as very lucky to have a loving and healthy family, and that being at home a lot means he can spend much more valuable time with his children than if he had still been working full-time. He has spent a lot of time and energy over the three years developing effective coping strategies to manage his pain.

He has learnt, in essence, to do two things: firstly to *accommodate to* his pain by perceiving his ability to lead a satisfying life despite it, having learnt to think of himself as something more than this person with pain, who can be free and creative beyond it; and secondly to *accept* his pain, acknowledging that he has it, giving up unproductive attempts to control it, acting as if pain does not necessarily imply disability, and being able to commit his efforts towards living a satisfying life despite pain.

Our job as pain managers seems then to be as guides from non-acceptance and negativity to acceptance and positivity, but if we who provide services for the evaluation and treatment of pain are seen to find therapeutic failure and continuing pain unacceptable, what sort of confusing messages are we giving - can we be surprised if patients behave maladaptively? There have been few studies on acceptance of pain, perhaps reflecting a general reluctance to accept it among those whose work it is to try to relieve it. Such as there have been, notably the work of McCracken, have shown that greater acceptance of pain is associated with reports of lower pain intensity, less pain-related anxiety and avoidance behaviour, less depression, less psychosocial disability, and better work status.

The road from non-acceptance to acceptance is long and convoluted, different for every individual, and our role as guides is far from simple. Some need help on every step of the way, and some can manage very well on their own once they have been pointed in the right direction. Some need to realise that having already been living with pain for years they have already developed skills in coping. So far we have talked only of the individual and his lonely road, but of course very few people live alone with their pain, which nearly always involves other people. Some may need to acknowledge that they may have been so totally taken up

with their pain that they have excluded, and failed to recognise the effect they are having on, the family who may be the only support they have. On the other hand, family and often societal attitudes may act to powerfully reinforce a negative self-image, for instance as regards ability to work, especially when there is nothing obviously "the matter". These malign influences are not going to go away, and may pose a continuing threat to a hard won but precarious positivity, and the need for continuing support is correspondingly great..

Pain as a spiritual battlefield.

Julian Campbell, Consultant in Pain Management, Harrogate

2 Case histories:

First a lady with chronic pain, who claimed that she had healing powers associated with her Gypsy descent: she had been unable to cure her own pain but had healed her family and friends, including her daughter, who had had an ununited fracture of her arm. Unfortunately this healing had had the side effect of making her barren. The clinical psychologist had judged that she was not "mad" and the daughter confirmed the story. Was this a psychosomatic effect acting through her autonomic nervous system and hormonal state, simply coincidence - or possibly the visible sign of a spiritual battle? The patient attributed her powers to the supernatural, but not to God. She was successfully helped by the multidisciplinary team and discharged, but Julian continued to pray for her and her daughter. Two years later she was seen again in the clinic with a minor recurrence of pain, and this time brought her daughter and grand-daughter.

Second, a lady who had functioned very well until disabled by chronic pain. Again she was judged as not "mad" but when completing a questionnaire which included an item about religious beliefs (Christian, Jewish, Hindu etc,) she ticked all of them. On being asked to explain, she averred that she was regularly visited by the Angel Gabriel who dictated books to her, teaching that all religions were the same, God and the Devil were the same, and we could become like gods. The team helped her to overcome her disability and she returned to work. Two years later she returned with a severe recurrence of pain provoked by anxiety about being rehoused by the council as she had buried the angel's books in the garden! She was helped once again by the team but also prayed for.

Both these patients may have been suffering from fixed delusions but both appeared otherwise completely rational and seemed to demand an attempt at an alternative explanation, and an intellectual framework to fit them into. It is suggested that although they were, to say the least, unusual, they may represent the tip of a spiritual iceberg. A whole person can be regarded as an indivisible mix of body, soul (or mind) and spirit. "Spirit" defies easy definition; it is perhaps that within us which responds to God and suggests something, which will outlive the body to survive eternally with Him. Its existence cannot be proved by double-blind observation, but there is evidence that prayer, which could be said to act through the spirit does "work". (Including a double-blinded trial of prayer for cardiac patients undertaken in Chicago). Pain may play a part in promoting spiritual "growth" and thus have eternal value which is not immediately apparent. It is suggested that as body, soul and spirit be integrated into a whole person, so a spiritual dimension should be integrated into our

work with pain and suffering.

Discussion

What is the place for prayer in the pain clinic?

I pray for other members of the team (who are not Christians) - for protection in the spiritual battlefield in which we are in the front line - and for patients but not with them unless they initiate it, as I feel that to do so would be to relinquish my role as a pain doctor, which I have a duty to the patient to maintain.

It is well known that people under severe stress do quite often start to experience the kinds of beliefs described. Sometimes this helps them but sometimes this goes the other way and may contribute to psychological breakdown. This is much commoner than we think; lots of people have supernatural experiences (although these don't necessarily come from "outside") and the important thing is what they do with them. It therefore behoves doctors not to be dismissive of peoples' beliefs, as they are part of their lives, and can be used helpfully, even if we are personally inclined to scepticism.

Stress in Pain Management Practitioners.

Roy Miller, SPR in anaesthesia and pain management

Many studies have shown that all health care workers are prone to high levels of stress , anxiety and depression, reflected in a high suicide rate.

Stress has been defined as a three-way relationship between environmental demands, feelings about those demands and ability to cope with them; and burn-out as emotional exhaustion and depersonalisation, leading to negative, cynical or impersonal attitudes to patients. Stress might be regarded as a temporary adaptation, and burnout to final breakdown.

The risk factors for stress and burnout have been documented by Ramirez in a study of 900 consultants as: youth (age less than 55) , insufficient training in communication and management skills, feeling overloaded, dealing with patients suffering, and unrealistic expectations of what can be achieved.

Some of the causes of stress are common to all branches of medicine and some specific to pain management. In the former category are included those which arise from the patient/practitioner relationship, dealing with relatives, pressures from colleagues, pressures of time, limited resources and organisational issues such as accommodation and staffing. Events and pressures outside the workplace may contribute, as may career pressures and worries about inadequate training.

Pressures peculiar, at least in degree, to pain management include dealing with patients' anger about previous doctors and treatments, patients' unrealistic expectations and demands for further investigations and cure, and dealing with chronic pain which by its very nature is intractable and difficult to treat, with interventions which frequently fail. Resource and organisational problems may be worse than for other specialities. Conflicts may arise between pain management and other duties, such as anaesthetics. Lack of support, especially for the isolated practitioner (not forgetting the isolated nurse) may make it even more difficult to cope with all this.

Although some factors outside work may contribute to stress, others may play a part in protecting against it, such as the availability of a supportive confidant; (and as shown in one study,

having children of one's own). Susceptibility to stress is clearly influenced by personality and coping styles. A study of doctors and nurses in ITU's showed that the latter were more prone to stress, not least because of perceived lack of control - a problem many pain practitioners will recognise.

The BMA report on the prevention and management of stress recommended the reduction of demands, by reducing excessive working hours and encouraging better working practices. The cynic might comment that this usually requires improvement in the funding for resources and personnel , whose inadequacy is the cause of much stress in the first place. The CSAG report on provision of pain services may provide a basis for addressing these issues.

Pain management practitioners need to be more sensitively aware of the problems of stress affecting their colleagues - and indeed themselves. There have been few studies in this area and more are needed.

In discussion it was agreed that difficulties of maintaining motivation could be helped by regular team meetings.

It was asked whether burn-out etc because of "overloading" might not be very similar to the way patients are overwhelmed by pain? The advice given by the B MA to place less demands on yourself and resume control over your [professional] life etc. is much the same as we give to patients and our problems seem to mirror theirs.

It was suggested that repeated follow up visits could perhaps be minimised by helping patients to accept the limitations of pain treatment (and perhaps learning to accept this ourselves?). The first consultation is so important in this respect - more time spent on this may save much time later.

An observation which struck a poignant chord for many in the group, was that good communication skills could be a double-edged sword: if you listen better you are going to hear more things you don't want to hear. Empathy can be painful. The therapist who listens can feel exposed and vulnerable, and needs much support.

Chronic Pain as a Block in the Natural Healing Process.

Barbara Collier, retired consultant anaesthetist.

Ah, solving that question
Brings the priest and the doctor
in their long coats
Running over the fields.

Philip Larkin, from "Days"

Pain is usually associated with suffering , injury and disease; Plato taught that "everything that takes place naturally is pleasant - what is contrary to nature is painful" and the word pain is derived from the Greek word for punishment; but it also has the protective function of warning that healing is incomplete.

A study was undertaken as long ago as 1980 (when a dualistic concept of pain had only begun to be challenged) to assess patients' understanding of the idea that maladaptive behaviour and thought patterns were as much a block in the healing process as incomplete resolution of physical injury (as part of a wider study of the value of local anaesthetic blocks in assisting rehabilitation) , and the results used to introduce them to a multidisciplinary approach to their problems, and to accept the participation of a psychiatrist in their treatment.

Communicating with Patience:

Optimising coherence and compliance between professional and client

Anup Biswas, Consultant Anaesthetist

.To start with, men and women are different! - not only in obvious ways but even in brain structure: although the male brain is a little bigger and heavier the corpus callosum, which links the two hemispheres and different parts of the same hemisphere, is substantially bigger in women, with many more fibres. This is said to explain why men are good at doing a single task at one time, while women are much better at doing several things at once. Other differences include a sense of orientation, which is better in men, and rhythm, which is better in women. The left side of our brain is more concerned with logical tasks and the right is more creative, and the right side is more advanced in women. One consequence of this is that women are better at lying than men, and better at detecting when men are lying (a difference which is well recognised and exploited by both police and customs officers) But the important differences in the present context, and the ones we can make use of, are those appertaining to communication; that is, speech and listening. Each sex tends to be naive to be naive as to how the other communicates. Men mainly use speech to convey facts and data, and little else: the telephone and the fax are simply tools for this purpose alone. Women on the other hand are much more likely to use speech to develop relationships, to bond, and to reward. A woman will use more words to reward someone she likes or loves. In a typical day the average male will use 6-8000 spoken words, most of which he will have used at work but the average female will use 16-24000 about 10000 of which will be left until after he comes home! Men actually enjoy silence but women use it to punish men!

As professionals we can learn to adjust our communication according to the bias of the person we are communicating with. Besides gender differences in behaviour, different personality types tend to behave and react in different patterns (such as predisposition to illness or chronic pain). There are three stages in learning to improve communication: firstly understanding ourselves, secondly recognising patterns of behaviour in others, and thirdly, and most importantly, learning to modify our behaviour in order to accommodate the other person.

To start with, we are all to a greater or lesser extent outgoing or reserved, and task-orientated or people oriented. According to our place on these ordinates we can be classified into a number of personality types:

Firstly, D types, who are both outgoing and task oriented. D Types like to be dominant, are direct, decisive, and demanding or stubborn. They tend to be life's doers. Unfortunately they also tend to be defiant, which is not always appropriate. They like to win, to plan for the future, and to embrace new ideas. They are very results oriented, they like to be in charge, to move fast and to respond to challenge. We can probably all recognise D types among our surgical colleagues.

Secondly, I types, who are still outgoing, but tend to be people- rather than task- oriented. They are easily inspired but also a source of inspiration to others. They are easily influenced but also influence others, and are both impressionable and impressive. They are both interesting and interested, especially in other people, and are interactive and involved. Unfortunately they tend to be illogical, because they tend to think with their emotions rather than their minds. They enjoy fun and surprises. They like to be liked, to express ideas and feelings, have no problems being in front of a crowd, and are motivated by recognition rather than results.

S types are also people oriented, but tend to reserved rather than outgoing. They are supportive, stable, steady and reliable, and sweet and shy by nature. They prefer the status

quo to change. Their problem is that they can't say no so often end up as suckers. They like to be accepted, and thrive on appreciation. They are best with teamwork, co-operation and harmony, and don't cope well with conflict. They like routine, things to stay the same and sticking with what works.

Lastly C types: who tend to be cautious and calculating, and averse to risk taking. They are usually competent and bright, with logical thought processes. They are conscientious and hard-working, but contemplative. Sadly they may appear to be cold and distant, even when they don't perceive themselves in that light. They like to be right, to know what is expected of them, and to have an established pattern of life with clear instruction and boundaries. They are good organisers and list-creators.

So we can learn to appraise peoples' personalities just by asking two questions. The challenge then is to recognise oneself, and other people, whether they be patients, colleagues or family members (acknowledging that we and they may sometimes be a blend of types) and to modify the way we manage them, and help them to manage themselves, according to our and their "styles".

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Inevitable Iatrogenesis

Philip Cartwright, Consultant in Pain Management.

A large part of pain clinic consultation is taken up with explaining symptoms and undoing medical misinformation that the patient has acquired in the past, the amount usually being in direct proportion to the number of doctors he has seen. It is contended that much illness and disability is a direct result of the modern biomedical model of health.

The "scientific " emphasis of most medical education, with illness always attributable to disease and identifiable pathology, has lead logically and inevitably to the compulsion to reach a diagnosis by investigation and re-investigation, disregarding the biosociopsychological nature of much chronic illness and pain - a compulsion fuelled by the fear of missing a serious or potentially treatable disease and consequent litigation. Some investigations, such as lumbar spine X-rays are pursued in every case despite a minuscule chance of discovering pathology. Furthermore the public have been led - partly by the media, but also perhaps by the Patients' Charter - to expect a diagnosis and cure for everything. The result of this has been to encourage the patient's overwhelming need to have a pigeon-holed diagnosis , and his doctor to con him off with a label (often Latin-based the better to impress); and the over -medicalisation of all patients' conditions, whatever the symptoms. This of course applies quintessentially to low back pain. The difficulty of explaining symptoms on a basis of recognised disease has led to the emergence of many new diagnostic labels, including so-called functional disorders such as fibromyalgia. Yet another difficulty is imposed by a code of conduct which discourages criticism of colleagues and disagreement with their opinions. Biomedical definition of disability has led society to give doctors the responsibility of deciding medically who can and cannot work .

There has been an enormous rise in chronic illness and disability, especially related to pain, in the last few decades without any real basis in the pathology of the human condition; perhaps Ivan Illich was right in his critique of the expropriation of health by the medical profession.

Discussion

This process has been exacerbated by a new scourge, the Internet. (illustrated by a patient with no serious problem who had been told by a rheumatologist that she had FMS. She looked this up on the internet which informed her that it was an untreatable condition with a dire prognosis , and took herself to a wheelchair.) The danger seems to be that there is a lot of dubious information available, and most patients don't have the medical background to enable them to judge its merit. This

redoubles our obligation to give them good information; but it was suggested that to say that patients should never try to inform themselves might betray some arrogance on the part of the doctor who claims to know every thing there is to know about a condition, and denies patients the opportunity to find out about new treatments the doctor might not be aware of.

Information is an indispensable prerequisite of understanding; it is very necessary to discover what previous information has been given if we are to make sure that the patient receives the right information . It is also vital that all of us involved in pain management should co-operate to work out common goals and an agreed message, and essential that putting over this message should start at the very first consultation.

Is it ever wise to give a patient a diagnostic label, even though this is often what patients most want? - for the reasons outlined above and also because doctors may put widely different interpretations on the same information, e.g. one radiologist may look at a spine X-ray and describe in detail the degenerative changes in the discs and facet joints (tempting the GP to tell the patient that "her spine is crumbling") and another will simply report normal ageing changes. Both these interpretations are right but only one is helpful.

This provoked much argument: if we refuse to give patients the diagnostic labels they so much want they may conclude that we don't believe there is anything "really" wrong with them and we will lose essential rapport . Labelling should never be a substitute for exploring all the facets (emotional, motivational etc) of patients and their conditions, and steering them away from a biomedical concept of their pain, but it is not a question of choosing one thing against another. Labels may indeed sometimes be useful , for instance where there is a defined medical condition such as Post-Herpetic Neuralgia; the (often misused) category "functional" can be a useful one to put over the idea that malfunction of a healthy body (i.e. without disease) - or indeed of the whole person - can result in pain. Patients need a diagnosis to give to their family and neighbours as a reason for their disability, and to re-establish their place in society.

What is important is how the patient uses the information given, and this depends very much on the quality of the explanation we give him. Diagnosis is never the end of the therapeutic process, always the beginning.

We must always look at each patient through several windows; the way they use the information we give depends very much on their personality type, coping skills, tendency to catastrophise etc. (as exemplified by the patient with fibromyalgia who took to a wheelchair), and we need to assess this in deciding what sort of information we give them. We also need to recognise our own personality type; if we are the sort of person who likes to make simple snap decisions quickly, we need to realise that although we might make good surgeons or intensivists, we can do a lot of damage in the pain clinic.

It is important to involve the patient in the decision making process - he needs information, and so can decide for himself what needs to be done; it is wrong to withhold diagnosis if this denies him this responsibility, and may be done with mistaken kindness. (like a woman with MS who went 5 years not knowing the cause of her symptoms).

It is also important to find out at the first consultation just what the patient wants: many have already made a diagnosis and want it confirmed by the doctor ; others just want a pill. Some need to be given time to adjust to change in their lives, others time to get over associated depression which may make it too difficult to accept a diagnosis and think about it constructively. The ones who just want a pill need not (and cannot) be forced into anything better but should be given every opportunity to come back if they change their minds. Giving a diagnosis is only the start of, and an element of an information process which includes correcting of misinformation; if we use diagnosis by itself, out of context in this process, then we run into trouble. Doctors sometimes give diagnoses without understanding; patients crave one in order to understand. A diagnosis which doesn't lead to understanding is useless. We as professionals should be able to empower patients with the understanding they crave. This requires integrity - if we don't understand we should be upfront and say so; nor should we hide behind excuses like not having enough time. People with different personality types have different needs in terms of understanding.

"Labels" and "diagnoses" are usually used synonymously but they are not: diagnosis must include elements of aetiology and mechanism . People tend to use labels to define themselves (as "back pain sufferers" etc)

It is important to give a diagnosis which confirms the "reality" of the patient's complaint; the word "functional" is often taken to imply that the pain is "unreal". This is surely a misuse of the word (albeit a well established one); in its proper sense, what better one is there to describe and explain pain without demonstrable pathology?

A diagnosis may be necessary for a patient to get benefits or compensation - there must be something on a certificate. To get beyond this will require a huge awareness campaign - for patients, doctors, the public and politicians , and the media (negative reporting of back pain suggesting it is commonly " put on" in order to claim benefits has been hugely damaging,)

Patients are caught in a net of catch -22's ; it is much better to anticipate the vicious spiral of chronic disability by keeping them at work , and if you give them a label it will only help push them the down the spiral, but they are subject to pressures from employers to perform and will lose their jobs if they fail to keep up without good reason; on the other hand if they are labelled as having a damaged back they may never get another job. Once you're laid off, the more illness behaviour you develop, and the more society rewards you - and if you get better you lose those benefits (but unemployment often means quartering of one's income - hardly a reward).

The key to keeping people with pain at work is education about pacing , planning work activity etc, not only for patients but also employers. The latter are difficult to influence but there are signs, admittedly as yet isolated , of an improvement in employers' attitudes. They will be persuaded if we can show that good pain management (in every sense) can effect real change.

Some people are very resistant to the idea of re-training; their old job has defined their "me" and their place in society. They need much help from us to get them to the position where they will accept their new situation. But it's no good if there isn't a job there at the end of the process - the reality is that many people are effectively unemployable. Work is defined as an 8-hour day - there is very little part-time work available; perhaps employment laws need to be changed to enable people to keep their jobs but only work hours they are capable of - it's a waste of time teaching them about pacing otherwise. Trade Unions have been against this as they are afraid full-time workers will be undermined by part-time; but it is very wasteful of the skills of people who can't manage full-time work - frequently only temporarily - if they aren't aren't allowed to work at all.

We who work in pain clinics have to accept the burden of dealing with people in this sort of situation ; how do we cope with this and suffering and therapeutic failure? Traditionally we have been taught to cope by detachment, but should we be trying ourselves to learn acceptance of things we cannot change? Or is this and the other things discussed at this meeting simply intellectualising the matter?

There isn't any reliable way of measuring tangible outcomes of pain management, but the system demands outcome measures for funding etc.

Perhaps we could use patient understanding as an outcome measure..... and throw the ball back at the patient: what have *you* achieved, what have *you* got out of it? - not what have *we* done for you.

Michael Hare Duke

Theology and Pain

There is a quote which I believe comes from Ralph Dahrendorf's Reith Lectures
to the effect that
"History advances not so much by solving its problems but by, from time to
time changing the subject "
.
In earlier generations the perception of human life was of struggle and pain,a view endorsed by the Bible. As Adam and Eve are driven from the Garden of Eden, the man's condemnation was
'Cursed is the ground for thy sake; in sorrow shalt thou eat of it all the
days of thy life.'

For the woman the sentence was
' I will greatly multiply thy sorrow;
in sorrow shalt thou bring forth children.'

In the Book of Job the theme continues,
"Man is born to trouble, as the sparks fly upwards"

In the Seventeenth Century when Hobbes comes to write his political treatise Leviathan he defines human existence without imposed authority as
"no arts; no letters; no society; and which is worst of all, continual fear
and danger of violent death; and the life of man, solitary, poor, nasty,
brutish and short." (pt 1 chapter 13)

The perceptions that lay behind such a depressing picture came from the observation that disaster and death were mixed with beauty and pleasure in the natural world and that human nature veered between love and tenderness on the one hand to violence and tyranny on the other. For the most part however the negative aspects seemed to dominate.

This gave rise to the question, How did a good and gracious God create a world of so much pain? The answer came in terms of human sin which had skewed the original design. In theology it is always important to discover the hidden question in order to understand the answer which, if taken alone, can be obscure. This point was illustrated by a game that was popular in America some twenty years ago. The purpose was to guess the question that lay behind an answer. For instance, if the answer was '9W' what was the question? It was totally obscure until the first half of the conversation was revealed 'Do you spell you name with a V, Mr Wagner?' Only then does Nein W make sense!

To do theology one needs to discern the underlying question and also the context within which it originates. This is particularly true over the attitude that has been adopted to physical pain and distress.

Most of human history has been lived with a sense of the inevitability of suffering, especially that caused by poverty and disease. Where was God in this? Following the Old and New Testament, the Mediaeval Church was led to the assumption that sickness was most often the result of sin.

This point of view is most clearly expressed in the Prayer Book of the Church of England in a collect provided for use "In time of any common plague or sickness"

O Almighty God who in thy wrath didst send a plague upon thine own people in the wilderness.....Have pity upon us miserable sinners, who now are visited with great sickness and mortality..... that like as thou didst then accept of an atonement and didst command the destroying Angel to cease from punishment, so it may now please thee to withdraw from us this plague and grievous sickness;
through Jesus Christ our Lord

There are many similar examples of the link that is made between human sin and the failure of prosperity especially in the matter of fair weather. The questions Why have our bodies failed in health or the weather turned against us, were answered by reference to personal or corporate failure to obey God. The obvious ills of society were Poverty and Pain. There was no way of explaining their incidence and since everything was understood to be in the hands of the Almighty God they must reflect his will.

Jewish spirituality began by seeing the process as one of Sin - Punishment - Repentance - Healing. Then there was interposed the possibility of Vicarious Atonement. After the experience of the Exile, on the return from Babylon the Israelite Calendar included an annual Day of Atonement which involved enacting the ritual of the scapegoat. There was written back into the story of the Israelites in the wilderness escaping from the Egyptians, the idea of Moses standing in for them to make atonement to Yahweh for their sins. In its final form this is part of the Christian understanding of the death of Christ. It needs however to be clear that the image of the Cross as a substitutionary sacrifice is by no means the whole story.

But in the context of the early and mediaeval church the question became in part a pastoral one: 'How do we make sense of the pain and the poverty which are for us an inescapable part of our life?'

The Epistle to the Colossians provided a text which suggested that later sufferings can be linked to those of Jesus in a way that gave them meaning. Paul wrote 'I am now rejoicing in my sufferings for your sake, and in my flesh I am completing what is lacking in Christ's afflictions for the sake of his body, that is, the church.' (Col 1, 24) There are other ways of understanding this text but it is not difficult to see it as saying that all the pains that Christians suffer can be added to the sufferings of Christ to make up some kind of bank of meritorious pain. This is most easily assumed to be the way of interpreting the pain which comes to good people and which can sometimes be sought by them as a way of uniting themselves with Christ in bearing pain for the sake of the world.

I am not arguing for this kind of spirituality but simply pointing out that in a world where there seemed nothing to do but put up with pain and suffering, it needed some kind of a story to make it bearable. This was the story that dominated popular theology as long as humanity lived with the experience of pain that could find no relief.

St Francis embraced the pain of the Passion and bore in his body the stigmata or wounds of Christ. At the same time he identified himself with the poor and the lepers as representing the poor Christ. If as a result people could bear the things that could not be changed, then this was a useful theology.

The same kind of reasoning lay behind the ascetic practices which characterised the spirituality of some Mediaeval saints; typically Catherine of Sienna, who have been called 'the holy anorexics' .Catherine was born into a rich mercantile family in 1347. Overcome by a sense of guilt at living after her sisters had died and panicking at the prospect of having to marry her brother-in-law, she made a bargain with God that in return for the guarantee of salvation for all her relatives, she would embrace a life of radical piety. As an outward sign of this pact she cut off her long blond hair, put an iron chain around her hips, replaced her fine

garments with a crude woollen shift and limited her diet to bread, water and raw vegetables. Flagellation with the chain inflamed her
skin and insufficient food reduced her weight by half within months. Despite her weak state Catherine undertook extraordinary acts of charity as she cared for the sick and dying, and made great efforts to reform the Church and the papacy . When these failed she gave up even bread and existed on water and bitter herbs, dying three months later in 1380. She was canonised in 1460.

This is a move from a theology which provided a response to suffering to one which actively sought it as a way of personal sanctification and also as a way of engaging with, perhaps manipulating, the processes of history. This involved a perception of events as divided starkly into good and bad, black and white.

A potent flowering of this popular perception was in the hymns of Mrs Alexander, wife of the Archbishop of Dublin., whose God presided over a moral order that required sacrifice for sin, and for whom everything was aligned on one side or the other in a dualist conflict. She has no room for shades of grey or ambivalence:

There was no other good enough to pay the price of sin

.She could only see :

All things bright and beautiful.
All Creatures great and small
All things wise and wonderful
The Lord God made them all.

It has remained the task of the Monty Python team to provided an alternative and more pervasive perception of a creation where all things are part of the Creative Will :

All things sick and cancerous
All evil great and small
All things foul and dangerous
The Lord God made them all

All things scabbed and ulcerous
All pox both great and small
Putrid, foul and gangrenous
The Lord God made them all

Since the nineteenth century when Mrs Alexander wrote, we have entered a new phase of human history where in many ways we are more in charge of our lives and therefore less in need of a cosmic dependency where we cannot afford to find fault. This is the period when Huxley was able to claim triumphantly
'Evolution has taken charge of itself'.

The human sciences have attempted to predict behaviour personally through the study of psychology and corporately through economics and politics. There is no longer an inevitability in the unfolding of history, but rather an understandable pattern of the play of market forces.

Meanwhile medicine and surgery have taken steps to confront the inevitability of disease

and pain (and perhaps to try to dominate it by intervention) Popular expectation has outrun the claims of scientific medicine and tends to assume that every problem can be met . We need to be in control, ignoring the fact that things are as unpredictable as the croquet game with flamingos and hedgehogs in Alice in Wonderland and the way that changing the tension in one strand of the spider's web affects the whole structure (But on the other hand perhaps we should not simply accept that everything is chaos, and should ask the question: who *is* in charge) We are left with a view of pain as an enemy to be conquered and perhaps for some the same is true of death itself.

Yet a pain free and perhaps a death defying existence is not the stuff of which our epics are made or by which the characters of our heroes are thought to be formed. Is this because we have been making the best of a bad job or is there inherently something important for each human being in overcoming difficulty and adversity? Is the slogan 'No pain, No gain', simply an attempt to make the best of a bad job or is there an ennobling quality in pain? Or is that a justification for masochism?

The answer will depend on our definition of pain. How far does this include emotional distress, the experience of loss and mourning? Here again increasingly pharmacological remedies are being sought for psychological ills like depression. How far are pills the remedy for anxieties about old age or the fear, of terminal illness? Just as palliative care seeks to take away the physical hurt, can we accept that the pain of the spirit can also be appropriately alleviated? Or have we a lurking suspicion that people grow by confronting them?

We must ask ourselves: whose side are we on? And does this depend on our perceptions of medicine
or a faith position which must be argued at another level?

Professor Hans Kung of Tubingen has addressed this question in his book 'A dignified Dying', with the question of how far a patient has the right to say "I have endured enough". In the teeth of a theology which argues that any embracing of death is unethical, Kung declares that his faith begins with a God who is the gracious Father, not an author of unbearable pain which will prove our trust in Him. He writes that:

"Precisely because I am convinced that another new life is intended for me, as a Christian I see myself given freedom by God to have a say in my dying, a say about the nature and time of my death - in so far as this is granted me. Certainly the question of a dignified dying may not in any case be reduced to the question of active help in dying: but it may not be detached from that either. A dignified dying also includes responsibility for dying in keeping with human dignity - not out of mistrust or arrogance towards God but out of unshakeable trust in God who is not a sadist but the merciful God whose grace
proves eternal."

It seems that Palliative care has got to come to terms with the question at what point palliation comes to an end and leaves the way open to a more radical control of pain, that brings to an end a life which is unbearably painful. Now this is not simply a theoretical matter. As we grow older or consider our death as a relatively imminent event, we have fears not about today but about tomorrow. Will we be able to cope?

There is in this an important theological point. When we say the Lord's Prayer the words we use are translated 'Give us this day our daily bread'
In fact the Greek is much more puzzling, the bread (to arton) is described as 'tomorrow's bread' (epiousion) [Mat 6,11 Lk 11,3]. Various interpretations have been tried but it seems to me that we are looking at the prayer that gives us confidence to cope with the immediate future, so that we can live today without being overwhelmed with anxiety for tomorrow.

The old often carry a burden of worries about how to pay for future care, the threat of future illness and what will happen when a particular point of immobility, dementia, or indignity is reached?

What assurance can be given to such worries? Once it was possible to talk of leaving the future in God's hands. How far have the medical profession taken over?

Where does your confidence come from, to operate in this twilit area? (anxiety about which emerged in much of the previous day's discussions) What theological stories do you and your patients need to be able to work together with a confidence that all will be well?

Discussion:

Most people accept the physical and psychological "windows" through which we can look at someone's personal "aquarium" but is there a third spiritual window (as illustrated by the story of the gypsy "healer")?

This has to be a personal decision for the practitioner, and although we are not permitted to impose our beliefs on patients, our approach will inevitably be determined by them.

Is intolerance of poverty and suffering mainly a feature of the affluent West? - these things are accepted in the IIIrd world, which doesn't seem to have been afflicted by the same epidemic of chronic disability and pain.

What about the people who don't want to be healed?

Yes; Jesus understood this as illustrated by the story of the man at the Pool of Bethesda who hadn't anyone to help him in; His first question was "do you want to be healed?" This brings up the whole question of secondary gain, the way some people identify themselves as pain sufferers, and others don't want to take responsibility for themselves. People have to want to get better.....but for some, living with pain takes so much of their energy that the effort of even imagining that things could be better is too much . Most of us have neuroses we would like to be rid of but won't try - if we've got used to pain or poverty it's natural to find it difficult to want to change.

People who have come to accept that they will never get better tend , at least in the clinic, to get the message from us that there is little we can do for them - that we are both resigned to failure. It needs someone - perhaps in the PMP - to give them hope.

TSE has passage in Four Quartets about waiting without hope, love or thought , but realising that faith , hope and love are all in the waiting.

But isn't this nihilistic? - just passive acceptance of the status quo ?

No: waiting isn't inaction but non-action: a positive act of waiting , using the power of stillness;

- that's OK - we need periods of rest and stillness on the journey - as long as we don't give up the struggle -

- but we can't impose our agenda (or our religious position) on our patients, just help them to see their problems through a different window and perhaps get them to the point where they may accept change -

- but we're struggling with the patient, not against them .

It's very tempting to use action as a substitute for listening and thinking, or to put off the evil hour of getting to grips with a patient's real needs - or admitting that action is unlikely to help much and helping the patient to accept this. It can take courage (for the therapist as much as for the patient) to give up the struggle - and make the positive choice (*not* the same thing as passive giving up) to abandon the battle against pain , and to learn to accept it, to be still and listen to it and so on.

Most of us are anaesthetists and our whole training is directed towards providing expedient and effective pain relief; this is what patients expect of us - if they need spiritual help they should go to the priest as we're not trained in this role -

- but people do expect their doctors to help with many areas of life other than the purely medical, and those with no church involvement may already use the doctor as a substitute priest.

The Scottish NHS Executive is currently engaged in discussions with Trusts about the role of (and funding for) hospital chaplains. It has been made quite clear that someone is needed to pick up spiritual care of patients and that this should not be the responsibility of other NHS staff, but what with the opposition of humanists and the competing demands of non-Christian faiths it has been a very complex task to agree on who should be authenticated (and who should be paid !) to deal with all the anxieties about suffering and death which confront inpatients.

Our role [as pain psychologists] is to go "window -shopping" with the patient, to try to go into their chosen windows with them, and collaborate with them to work out together the best "purchases" for them -

-perhaps our role is more to draw back curtains from windows they hadn't tried before.

Can people be helped to grow through pain?

- it's a question of how pain is used (as in Sione's story of Joe Bloggs) - in itself it is never ennobling - for instance to develop a more positive outlook, and to learn better to cope with other vicissitudes of life.

Do we take our own advice - do we pace ourselves, set goals etc? Most of us set a poor example in this - can we be true mentors if we have never experienced and learnt to cope with long term pain ourselves?

- we have learnt coping skills in other areas of life; we might be able better to empathise with patients if we have suffered, but it is surely wrong to suggest that only those who have experienced chronic pain can be effective therapists.

Bishop Michael wound up the discussion with another Eliot quotation, this time from "Little Gidding" . At first reading this may seem a little bleak but for those of us looking back on a professional lifetime in pain management, wondering what if anything we have achieved, it does seem to put things into perspective.

> "And last, the rending pain of re-enactment
> of all that you have done and been; the shame
> of motives late revealed and the awareness
> of things ill done and done to others harm
> which once you took for exercise of virtue.
> Then fools approval stings and honour stains"

The Limits of Suffering.

Leslie Hickson, teacher of philosophy

The tragedies of Sophocles are full of suffering without hope. No one can escape suffering at least at some point in their life; for some this may occupy the greater part of their lives; all of us are touched from time to time by pain, loneliness, misfortune, sickness etc (other people's if not our own) and indeed no pleasure is ever perfect or uninterrupted. So if suffering is an inevitable part of the world, as we know it, like the colour of the sky or the grass, why do we rebel against it and ask what sense there is in it? - And never ask if there is any sense in joy?

Man out of all animals has a unique capacity for suffering and thinking about suffering: only man is made up of body and a soul/spirit that has the faculties of intellect and will - the intellect that allows us to ask questions "why", to know and seek for truth, to reflect on the meaning of pain, to be drawn to what is good and protect himself from harm (in more than a purely physical way), and the will that compels him to work and overcome suffering to achieve good ends. Only man endures interiorised suffering as well as physical pain, suffers before and after as well as during a distressing event and whose fear of pain is fed by his imagination; but also has the capacity to hope for relief; can experience joy and see pain as the antithesis of pleasure, can be liberated from his body by ecstasy and trapped in it by pain, and deliberately intend or allow suffering in others for his own advantage or pleasure. Only man can conceive of a God who is good and loving and the apparent incompatibility of such a being with the existence of suffering, but also can acknowledge that although suffering is inevitable, it has potential for good beyond its simple protective function, and helps us to appreciate the good things in life we usually take for granted .

"Interior" suffering is of course much more than the emotional response to physical pain but includes such things as fear of old age or of loss of dignity and identity (such as suffered by refugees and concentration camp prisoners) .

Does pain have meaning? All our efforts in relieving pain are a drop in the ocean of all the world's suffering; a moral solution is clearly necessary but it is tempting to run away from the problem and "abandon ship" - a path that can ultimately lead to euthanasia. The idea of accepting pain is foreign to a society that puts a major premium on comfort, fears suffering and prefers not to think too much about life beyond death. We need then to learn to accept pain as part of our existence and find ways of dealing with it. In the case of death and bereavement, we need perhaps to learn from other cultures how to publicly express grief rather than bottling it up in the British tradition.

Suffering can be seen as a task: the sufferer must learn to reorganise his life around it, to allow it to put things into their proper place and in proportion; dealing with suffering with a positive outlook may enable him to develop qualities he might never otherwise have done. Suffering can even be seen as a friend (like Billie Holiday's "Good morning heartache") - in contrast to the attitude expressed in "battling with cancer" as if cancer and pain were an external enemy instead of part of us. The sufferer being more aware of his finite nature and the fine line between life and death, can learn better to value life and everything in it. Suffering may lead to "purification" in the sense that many things we think we can't live without can be cast off, and we can learn what is truly indispensable. We can cope with far more difficulties than we ever thought we could ,as described by Frankel in "Man's Search for Meaning" how it was even possible to cope with life in Auschwitz . We can learn, like patients in a hospital ward (or a pain management programme) to value companionship in suffering, and use it to develop sensitivity and compassion towards others .

In order to realise the potential value of suffering in this way we need to be motivated by some reason , purpose or person: for the Christian this involves participation in Christ's Redemption , and for the Buddhist, the path to Nirvana and detachment from self. Suffering can be accepted and elevated to a higher plane by a higher end, such as love of one's country or family, or a high cause or ambition.

Love and suffering are closely linked: the more we love , the more we suffer with those we love, from the first birth-pangs to the moment of our death.

Nietzsche said that the man who has a reason to live can cope with anything, What is it that gives our lives meaning? This is found in our ideals and the task of achieving them, and is different for each of us - for one a thesis, another a symphony , another to see their children grow up. Our ideals and goals need to be realistic and achievable, but we should not set too much store on success or lack the courage to take the risk of failing. Nor should we see failure in one task or ambition as failure in our lives as a whole. Success and failure show us the difference between what we are and what we want to be, and help us to accept the limitations of our life. So it is with pain: we need not be overwhelmed by it as it touches only part of our life, not all of it; the limitations it imposes are rarely total.

Therefore, suffering cannot have the last word. It has to be given a context within the meaning of our life. If our life has a purpose, then both pleasure and pain will just be companions to, and parts of our journey through life, but if there is no purpose to our lives, suffering becomes an evil that must be avoided and suppressed at all costs.

In a materialistic society , people are valued not for what they are but for what they can produce , how much they earn, and their social status. Pleasure, power , money and health are equated with happiness. Pain may prevent the pursuit of these and thus "devalue" the person. Technical solutions are sought but often fail. Stoic indifference to suffering and fatalistic acceptance of blind destiny as in the Greek tragedies may seem to be all that remains. It is tempting to distance ourselves by thinking of pain in the abstract, and patients as statistics, ignoring its reality for every individual who suffers.

To help him escape from this apparent hopelessness the sufferer must be respected, accepted and above all loved; we never fully outgrow our need for the love our mothers enveloped us in when as children we were hurt, lonely or afraid, nor the potential for love to comfort and relieve suffering, even of the body. The best treatment in the best hospital may be of little worth if the patient is treated as an object; he must always be helped to know that his existence is not meaningless, that his life does have a purpose and value, which may even be discovered through suffering. This must be extended even to patients in an apparent vegetative state, who may only be "locked in".

All suffering, whatever the source of pain, ultimately takes place in the soul, and the doctor is often expected to play the role of priest or rabbi. He may reject this, but must never allow the patient to become depersonalised or labelled as a case (litigation lies this way) - he must become his friend. In illness people are at their most vulnerable and self revealing, and the doctor must link up with the person thus revealed.

In further discussion of education, of the public in general and senior management in particular, some successes were reported but also difficulties and frustrations: one participant felt her clinical work was suffering from her commitment to working for better recognition of her department; another pointed out that in many trusts there was an absolute ban on any sort of communication with the media.

Summing up

Michael Hare Duke

The strongest impression to have emerged from the last three days has been the need for support, and acknowledgement of stress: stress due to unreal expectations from patients, and anxiety that you can't deliver when you want to; and the stress of confronting people who show you an image of yourself, and lead you to wonder how you could cope - could you take on board the strategies we advocate for others? If you are continually confronting difficult issues, you're never completely "off the job". There are always pressures in the hospital environment; and it is all too easy to develop

maladaptive coping strategies. The stresses on pain therapists are very similar to problems afflicting the churches: confronted with too many alternatives, too many conflicting beliefs, even religions, all people want is something simple and straightforward they can subscribe to and be saved - but it isn't like that. And because it isn't like that people feel let down and there are pressures on the churches to come up with simple solutions that aren't true to life. In former times there was a straight highway of faith from which one could choose to deviate, and be identified as a heretic; nowadays it is more like a huge market place were there are too many choices to cope with without guidance. It is an anxious situation. So it seems to be, for pain therapists and their patients, with a corresponding need for support. You need a network of other people in the same trade with whom you can talk or correspond, try out your ideas with, and who will authenticate your perceptions - or who will tell you when you are wrong: what is needed is not so much unqualified support as insight. You should see, however, that you do have allies outside what may seem a small embattled group; the rest of the profession and society as a whole are gradually beginning to see things your way - you don't have to do it all on your own.

Concerns expressed in the small group discussions [which preceded this last session] included the need for political initiatives, for instance in the matter of disability and employment law and benefits, to remove disincentives for employees to return to work and provide incentives for employers to accept them. There is a need for "joined up government": linking of health and benefit expenditure for instance in the provision of back pain services designed to anticipate and prevent chronic disability and the huge expense incurred by the need to provide for this. Another suggestion was the need for education - something we all try to do for our patients but perhaps far too late - as early as the school years. Perhaps insights into living with pain could best be provided by people whose experience this is. (And almost more importantly, since it is something no-one can escape, children could learn about growing old from those who have already done so.) Such participation in "active citizenship" could be of great benefit to people disabled by pain or age by giving them purpose and sense of worth. Educating parents was also suggested: helping them to accept that their cherished offspring may not enjoy lives - even in childhood - free of sorrow and suffering; and educating society not to have unrealistic expectations, sometimes fed by the media, that scientific advances will soon lead to a world without pain. When you go back to work after this gathering, with new insights gained and old ones reinforced, you must do so with renewed determination to disseminate them amongst your colleagues, and to find opportunities to educate the public, like letters to the local press (Perhaps the BBC could be persuaded to broach the subject of chronic pain in that most venerable vehicle of public education: The Archers!) Yours is the voice that society needs to hear.