

CLINICAL FORMULATIONS; PHENOMENOLOGICAL AND TRAUMATODYNAMIC CONSIDERATIONS

Thank you for allowing me to share some musings on what we do during a busy day like today must be for you.

Akin to what we do with our patients, this talk may be viewed as a time out from deep resonance with patients, to consider what they are telling us and why. Similarly, this may be seen as time out to view our views and aspects of our philosophies which determine the way we see things.

The term traumatodynamic is put forward tongue in cheek, as something evolved between Prof Schweitzer and myself as we considered the topic for today. In a simplistic way it is to present a new slant on an old philosophical dichotomy which in psychiatry has been the phenomenological / dynamic, or organic / psychodynamic divide.

Using trauma, which neither half of the divide has done previously as a starting point, and speculations from new non-linear physics, I think the two parts of the divide can be bound together in richer and more valid ways than has been done in the past.

After a brief historical review, I will present some case vignettes, and then suggest a framework through which our diagnoses and treatments may be viewed.

History

Soon after Hippocrates declared that illnesses were not visitations by the gods but due to changes, especially major changes (Dubos, 1968), the secular dichotomy between phenomenological and dynamic theories of illnesses started. Plato's ideas of forms where each disease had a unique prototype influenced a phenomenological view, while Aristotelian ideas that each disease was shaped by universal attributes in particular ways influenced the dynamic view.

Phenomenology in Medicine and Psychiatry; Linear Science

As science emerged from the dark ages like Hippocrates, it again countered witchcraft and superstition by concentrating on the visible and logical. Three principles may be said to have developed which are relevant to current illness theories. The *first*, starting with Galileo, was *mathematical observation*. Because the language of nature was mathematics Galileo said, "Measure what can be measured, and make measurable what cannot be measured." (Gaarder, 1994, p 157). Newtonian physics confirmed a steady mathematical view of the universe. The *second* principle was *dualism*, cemented by Descartes, which separated body and mind. The *third* doctrine was *reductionism*, where smallest components were ultimate causes. For instance Virchow, the father of pathology held that altered cells were the basis of disease (Taylor, 1980). Bacteria, viruses, genes, hormones, biochemical compounds, leading to specific phenomenological diagnoses, enhanced the reductionist view of illnesses.

Psychiatry, in attempting to gain scientific credibility modeled itself on scientific medicine. For instance, through DSM it declared that it too had numerous diagnoses based on measurable scientific criteria, and it too searched for specific genes

and chemicals for causes. Klerman (1984) saw DSM-III as a reaffirmation of psychiatry's scientific medical identity.

Others criticised psychiatric scientism. Vaillant (1984) said that DSM's reductionism produced a lot of whats, but no hows or whys. Further, neither patients nor clinicians thought about symptoms and illnesses statistically. Weiner (1992) said that the reductionist paradigm was like fragments of a broken Humpty-Dumpty. He predicted that the fragments would be reconstituted in a medicine based on systems and non-linear concepts.

A Shift in the Scientific Paradigm; Non-linear Concepts

In the last decades in the very temples of physics and mathematics which scientific medicine aspired to copy, non-linear paradigms of quantum mechanics (Davies, 1984; Hawking, 1988) and chaos theory (Gleick, 1987) challenged old static linear paradigms and their logic, replacing them with images resembling fiction.

Quantum mechanics maintained that in the epochs of the first seconds of the initial big bang, space, time and matter froze out of a ferment of quantum energy. Their derivatives were greatly influenced by events in the epochs of the first seconds. At a deep level the axes which froze out and their derivatives (that is space, time and matter), continued to influence each other (theory of relativity). Particles, virtual particles and ghost particles of these cosmic events influenced each other through webs of vibrating energy patterns.

Static Newtonian logic was replaced by an apparently surrealistic dynamic language. To continue, sometimes events reflected aspects of the big bang. As a star aged it could develop a gravity so strong that it imploded on itself, becoming a black

hole enveloped in an infinite timewarp and a prison of curved space, where time stood still. This could explode in flash of energy called a supernova, resembling a star.

Understanding came from whole views, and yet the whole could not be viewed concurrently. For instance, neither the energy and matter properties of light, nor motion and position aspects of bodies could be observed at the same time. What was observed depended on the observer, and the observations had an innate uncertainty (Heisenberg's uncertainty principle). Further, the observer became important not only in what was observed, but also in influencing the system. "When someone looks.. an atom jump[s] in a characteristic fashion that no ordinary physical interaction can mimic." (Davies, 1984, p 40).

Chaos theory also emphasized the importance of the initial conditions in the "butterfly effect" (Lorenz 1979). Theoretically the flap of a butterfly in Brazil could set off a tornado in Texas. Apparently random events could be represented not in statistics, but simple codes represented visually as infinite complex loops so beautiful as to be described "like grapes on God's personal vine" (Gleick, 1987, p 221).

Elegance, beauty, harmony and unity were reflected in non-linear equations and codes described as the poetry of nature. They evoked awe and delight and search for cosmic meaning and purpose reminiscent of the sacred (p 148). The sterile, soulless, Newtonian view of the world gave way to the unifying perspectives of the new physics (Davies, 1984). Or poetry and metaphors were added to the language of nature.

Non-Linear Concepts Applied to Psychiatry

Neurophysiologists applied non-linear thinking to brain function. Bergland (1985) said that "hormonal harmonies" and other codes were the stuff of thoughts and the soul. Lonie (1991) and Morstyn (1992) noted applicability of non-linear paradigms

to psychotherapy. In both layers of meaning brought order to flows of apparently random information.

Non-linear thinking seems particularly applicable to traumatology. Analogously to the big bang, trauma may also be said to be a ferment of energy out of which freeze out dimensions of trauma. Analogous to time is the process of trauma. Analogous to matter are the parameters of trauma, such as the type of stressor, and social system (individuals, families, communities) affected. Analogous to space is are levels of trauma effects - physiological-instinctive, effects on morals, principles, dignity, meaning, identity, life's purpose. Each of them too is influenced by events in the initial epochs of trauma. As with the big bang traumatic events influence unpredictably long term constellations of illnesses, though as with cosmic constellations with information they can make retrospective sense.

Black holes and supernovas may be analogous to traumatic amnesias and hypermnesias which replicate the initial trauma. Black holes may be like intensely compacted traumatic memories imploding on themselves in timewarp where time stands still.

In traumatic stress too, divergent derivatives along the different dimensions 'remember' each other and continue to influence each other through a web of energy. Apparently random or chaotic divergent biological, psychological and social manifestations may be dissociated fragments which from a whole perspective can be seen to have core relationships. Events and memories within a web of energy may resemble particles, virtual particles and ghost particles which 'remember' each other.

As in quantum physics, neither the dimensions, nor their components can be examined concurrently. For instance, depending on the view of the observer, only one dimension, or one of biological, psychological or social aspects of an event may be

observed at one time. This introduces a principle of uncertainty, and as in non-linear physics too, the way the observer observes influences the system observed.

Finally, both non-linear physics and trauma effects contain vast complexities ranging from physical to ultimate meanings and purpose, which can nevertheless be represented visually and coded in relatively simple symbols and metaphors.

Let us use another such metaphor to explain what I mean. The frequent metaphor of trauma as the pebble in the pond (used in its logo by the International Society for Traumatic Stress Studies). The expanding ripples represent the process dimension.

****Draw three dimensions / Overheads

Each ripple is like a memory from the impact and subsequent resistances. Crests and troughs of ripples represent reliving and avoiding respectively. Points on ripples represent particular symptoms and illnesses and comorbid diagnoses involve other points on the same or similar ripples. The parameter axis involves the nature of the pebble and the pond, when the pebble was thrown at what angle at which part of the pond. The depth axis recognises that the pebble cause ripples underwater, disturbing different levels of life and the purpose of the pond.

An example of a code which integrates many random events may be the concept biopsychosocial. It may be represented visually as a butterfly with its center the biological, and the wings the psychological and social aspects. The butterfly flutters over the three dimensional framework and is refracted and seen differently at different points. The refractions usually only allow one or other of its parts to be seen at any one time.

If these seem fanciful explorations, they are nevertheless analogous to thought experiments in quantum physics.

Clinical Examples

Let me quote some clinical vignettes.

Case 1. 2 weeks after the Ash Wednesday bushfire a man sitting in his house was clinically depressed. Parameters, meaning.

Case 2. Elderly couple lost their home, furniture, photos. Wife died a week later. Long-term untreated depression. On anniversary of fires, worse and developed angina. On the anniversary of his wife's death he died.

Case 3. A young woman was admitted to a psychiatric ward for supposed depression, but she quickly disclosed that a friend of the family had seduced and abused her sexually for a long time and now that he married she was more than ever distressed at what had happened. Her parents were embarrassed, blamed the patient and imposed a conspiracy of silence. The treating psychiatrist reinforced this and concentrated on treating the depression. However, the patient's "depression" worsened, she became uncooperative, and slashed herself. She was then diagnosed as a borderline personality disorder and received high doses of drugs and electroconvulsive therapy. Much later in psychotherapy the original depression was treated as deep realization that she had

been abused and betrayed, and grief for the loss of her hope for love.

Case 4. Anne. Constipation and stomach pains (not allowed to soil), depressions (from time learnt of her parents' deaths), propensity to infections, headaches (suppressed rage), period and genital pains self-blame and shame(rapes), phobias (fire threats of ovens, water having been ducked in a bucket), paranoia and hallucinations (men appearing threatening her with death for telling).

Case 5. Schizophrenia. Devils in the street talking and laughing about her. Associated with father abusing her.

If we use paradigms of trauma such as pebble in the pond causing ripples, or big bang leading to galaxies and stars, it is suggested that within such paradigms we may find point, line and volume traumatodynamic diagnoses and treatments. Most types of treatment in fact embrace various degrees of volume treatments.

Point (Phenomenological) Diagnoses and Treatments

Diagnoses.

Point diagnoses are listed in medical textbooks such as angina, myocardial infarction, etc. In DSM equivalents are depressive, phobic, somatoform, schizophrenic and other disorders. Such diagnoses are like points on ripples, or stars. Constellations of such points may be described as illness syndromes, often named after the brightest star, such as anxiety in anxiety disorder and dissociation in dissociative disorder.

Treatments

Point treatments are applied to salient biological, psychological or social fragments. Examples of point treatments are anginine for angina, analgesics for headaches, and antidepressants for depression, desensitization for phobias, compensation for injustice.

Line Diagnoses and Treatments

Line diagnoses

Line diagnoses trace dynamic connections between two or more points. Points may be close such as suppressed rage and high blood pressure, or more distant, such as suppressed rage, high blood pressure angina and coronary heart disease. In psychiatry, adjustment disorders may be linked to stressors, dissociative disorders to dissociation. More points on a line may be seen in loss, maladaptive grief and depression, or trauma, dissociation and PTSD.

Line treatments

Line treatments may be applied at the recognized points of symptom and illness formation. For instance, treatment may be applied at various points in the progression from suppressed rage through hypertension, angina and coronary heart disease. Similarly, PTSD may be amenable to treatment by removal of stressors, early debrief intervention, treating maladaptive stress responses, and finally PTSD itself.

Volume Diagnoses and Treatments; Nonlinear View

Volume Diagnoses

Enrichment of diagnoses and treatments in this view is countered by fears of chaos from too many variables, and quantum uncertainty. For instance, it may be necessary to take into account biopsychosocial principles and illnesses which span textbooks of different disciplines. Even within the same discipline, one may need to take into account a variety of dynamic system inputs into clinical pictures.

For instance, PTSD, depression and many other syndromes may be influenced by different strengths and vulnerabilities, defenses and memories or lack of them. In addition, clinical pictures are influenced by different phases of progression, ages of patients, and family ramifications. Helpers are secondarily involved too and of course influence progression of illnesses by their views. (Atoms jump differently according to the view of the observer.) To add to the complexity, issues of morality, such as justice, worth and guilt, values, principles, dignity, meaning, spirituality and life's purpose may be at least as important as any other aspect of illness.

Volume Treatments

Volume treatments extend point and line treatments. They are aware of the whole and part, the biological, psychological and social, the "scientific" and humanist. Such treatments then overcome past philosophical dichotomies between science and humanist disciplines, mind and body, reductionism and whole, and now linear and non-linear views of the world.

Phenomenological or Traumatodynamic

It is suggested that point, line and volume treatments are all subsumed in big bang or pebble in pond paradigms. It may be said that the pebble in the pond is trauma of high energy. From it differentiate or freeze out three dimensions. The first is the process of ripple formation. Near the impact ripples are still undifferentiated with whirls and whorls representing the polymorphously undifferentiated complex acute stress responses. They then ramify into the three dimensions of symptoms and illnesses.

On the process dimension with time and depending on obstructions in the pond (defenses), the ripples become more formed and stereotyped. Points on them represent symptoms, while frequently coexisting points on same or adjacent ripples represent illnesses and syndromes. Syndromes on adjacent ripples represent comorbid diagnoses. Peaks and troughs represent relivings and avoidances or relapses and remissions of symptoms and illnesses. Ripples hark back to original events through different ways, such as physical agitations or psychological memories.

On the second parameter dimension, the type of pebble, its size, shape, and force representing the stressors, the part of the pond (individuals, families, the whole community) time after impact, will all add to the character of the ripples.

On the depth dimension the patterns of disturbance the depth of turmoil in the pond, its ecological life, and disturbances to meanings and purposes of ponds become important.

Implications

So what does all this mean for when you go back into the whirlpool of the rest of the day?

First, any symptom or illness may be enriched by considering it at the intersection of the three dimensions or axes. What is its origin, how did it get here biologically, psychologically and socially, from what perturbation in the past? And what other biological, psychological and social associated symptoms, illnesses and other features are relevant in this constellation of trauma effects?

On the parameter dimension, who else is affected? What is the phase of the ripple formation, why is the ripple manifesting in this particular way in this person in this culture?

In the depth dimension, what aspects of morality (guilt, shame, injustice) are affected? What values, principles, aspects of dignity, identity, meaning, spiritual aspect, purpose?

On the other hand, if preparing to see a patient, not being clear what the person is about, doing a summation or preparing for research, a checklist of the three dimensions may both enrich and specify problems. Such a checklist also includes oneself, asking what have I looked at and what have I ignored?

A wealth of opportunities may open to us with the view that any point on the different dimensions may be distorted. Symptoms and illnesses may now include guilts, shames, identity problems, despairs of existential meaning and purpose may be valid disturbances for us to diagnose and treat.

Having the whole three dimensional framework in mind (which I call wholist), allows choices of dealing with point, line and bigger or smaller chunks of volume diagnoses and treatments. It allows a wiser view of most cost-effective interventions and tailoring of treatment.

It is not traumatodynamic or phenomenological, of course, it is both, just like it is not linear or non-linear, but both, and it is not point, line or volume, it is all, according to what is most useful at the time. But it is worth us knowing the choices. The wholist view implies seeing all the choices at the same time.

Most of us have used the wholist view without know we have. But I thought it might be amusing to put it in different words and use non-linear paradigms which have heuristic force and colour.

The view is not a solution, rather it is a way of looking. It may open up rather than foreclose more questions and potential solutions. For instance, it may be interesting to ask whether one can identify in the initial traumatic situations, like in the microsecond epochs of the big bang specific features which then unfold later in specific ways? For instance, is it possible that specific biopsychosocial strategies of survival reverberate later in inter-related but specific biological, psychological and social symptoms and illnesses? And what kinds of biopsychosocial treatments may be applicable, using what techniques? And what research principles may evolve out of non-linear rather than the usual linear research paradigms?

These are all questions for the future.