Does biopsycosocial formulation work in addressing the notion of the self and delivering patient centred care?

Michael TH Wong
MBBS MD MA MDiv PhD FRCPsych (UK) FHKCPsych FHKAM (Psychiatry) FRANZCP AFRACMA FISCAST
Li Ka Shing Faculty of Medicine The University of Hong Kong
School of Clinical Sciences at Monash Health
Faculty of Medicine Nursing & Health Sciences
Monash University
Objective

- To assess the adequacy of the biopsychosocial model as a means of understanding the self and as a clinical approach for patient centred care in the increasingly multi-cultural and neurobiologically focused setting in the 21st century.
- To examine the psychopathological *validity* of the biopsychosocial model from the perspective of hermeneutics.
Psychiatrists and mental health practitioners use the biopsychosocial model in their formulation of the self and its illness in order to deliver patient-centred care.

Interpretation of bio-psycho-social correlates in the study of 

What to correlate with? 

Background (2)

Positron emission tomography in male violent offenders with schizophrenia

Background (3)

Cortical activation associated with the experience of auditory hallucinations and perception of human speech in schizophrenia: a PET correlation study

Copolov, Seal, Marruff, Ulusoy, Wong et al.

Background (4)

Hippocampal and amygdala volumes according to psychosis stage and diagnosis” – a magnetic resonance imaging study of chronic schizophrenia, first episode Psychosis, and Ultra-High-Risk Individuals

Background (5)

Level of study of biopsychosocial correlates:

Interpretation of biopsychosocial correlates:
(1) Specificity
(2) Causality
(3) Complexity
Method (1)

The biopsychosocial model was reviewed by a *hermeneutic* approach examining the *ontological* and *epistemological* nature of the biological, psychological and social discourses which make up this *multi-faceted* model with a focus on its implication for the understanding of the *self* and *aetiology* and *pathogenesis* of common mental disorders.
This is part of the project of “Hermeneutics and Psychiatry” which examines the fundamentals of psychiatric reasoning:

(a) mental health disorders – ontology and classification;  
(b) psychopathology – epistemology and phenomenology  
(c) diagnosis – illness narrative and hermeneutics  
(d) management – person-centred interdisciplinary psychiatry.
Self – a unified being connected to consciousness, awareness and agency

First person – Descartes, Locke, Hume, William James

Third person – no qualia, objectivity, operationalism

Eastern tradition – illusion of individual existence

Others – Self as knowledge
Self as activity
Self independent of the senses
Self as a narrative centre
Results (2)
The Battle for the Self

*Cartesian Cogito*– thinking, asserting existence and consciousness through objective, transparent and systematic doubting

*Freudian Ego*– challenging the notion of objectivity and transparency with the importance of the unconscious in shaping the cognition, emotion and action of a person

*The Self of Neuroscience* – attempting to rescue the Cartesian Cogito with neural correlates of consciousness and its reductionist epistemology and ontology
Results (3)

An adequate notion of the Self

*Both* the subjective and the objective

*Both* the conscious and the unconscious

*Both* the rational and irrational

*Both* the quantifiable and non-quantifiable
Results (4)

Hermeneutic Self

*Embodied self* – taking neuroscience seriously

*Narrative self* – taking personal narrative seriously

*Inter-personal self* – taking conflict of interpretations and surplus of meaning seriously

*Ethical self* – taking insight and judgment seriously

*Social self* – taking culture seriously
Going beyond – the individualistic, deterministic, reductionist and rationalist understanding of the person offered by the Cartesian cogito and Freudian ego taking neuroscience

Putting emphasis on – embodiment and narrative, providing an enriched and comprehensive ethical understanding of personal identity and agency which promotes mental health and well being
The biopsychosocial model was proposed to replace the biomedical model which was regarded as “mechanistic and reductionist in conception and inappropriate for many of the problems under study”

“whereas theories claim to tell us what reality is like, models claim to tell us what reality can and could be like – given certain speculative assumptions.”


A theory of mental disorders is about what they are. A model of mental disorder is about what they could be like.
Beer (1977)

Five steps of building a model:

(1) Specify the variables
(2) Specify the relationship between these variables
(3) Specify the level of error unaccounted for these variables
(4) Estimate the parameters of the model and its extent of specified relationships
(5) Regular review and update its identification with what it models

Beer (1977)
The biopsychosocial model is based on the General System Theory (von Bertalanffy, 1973) – a concept that human activities can be investigated at different levels. However, this no examination of the ontological and epistemological relationships of these different levels – the biological, psychological and social
The ontology or nature of mental disorders is not addressed by the biopsychosocial model:

Is mental disorder a “natural kind” or just a conceptual entity created by our classification system?

The mind–brain–body problem remains unaddressed:

*Is it nothing but the brain (eliminative reductionism)?*

*Is it mind and brain (dualism)?*

*Is mind emergent properties of the brain (non-reductive physicalism)?
Results (11)

The hermeneutic critique or solution:

None of the above.

Preferring a *semantic* rather than an ontological speculation
– Subjective/first person vs objective/third person discourse

There is a *pluralism* of scientific discourses/languages
– biological, psychological, social –
Hermeneutic Self

*Embodied self* – taking neuroscience seriously

*Narrative self* – taking personal narrative seriously

*Inter-personal self* – taking conflict of interpretations and surplus of meaning seriously

*Ethical self* – taking insight and judgment seriously

*Social self* – taking culture seriously
The hermeneutic critique distinguishes between

(1) *Dysfunction* or “Action failure”: inability to function in daily living due to physical and psychological difficulties (Fulford, 1989)

(2) *Illness*: perception, experience, expression and pattern of coping with dysfunctions or symptoms

(3) *Disease or disorder*: illness reformulated in terms of theoretical models of pathology or psychopathology
The hermeneutic critique attempts to link between Dysfunction, Illness, Disorder through the hermeneutic circle of explanation and understanding Dysfunction–illness (subjective discourse) explained by Disorder (scientific discourses: bio–psycho–social) leading to Dysfunction–illness better understood
Results (15)

The hermeneutic critique proposes the *therapeutic hermeneutical circle* of understanding (Dysfunction–illness) and explanation (Disorder) to take the form of a *multi-layered personal narrative* through which the patient supported by and engaged in a *dialogue* with the psychiatrist becomes *informed* by the *explanation* of the expert knowledge of the discourse of bio–psycho–social sciences and achieve *better understanding* of illness experience by *retelling* or rewriting his personal illness narrative.
The hermeneutic critique argues the multi-layered personal narrative allows a productive and warranted model for different scientific discourses (biological, psychological and social) to correlate with ordinary discourse and each other without committing the errors of

1. eliminative reductionism
2. idle/agnostic eclecticism
3. simplistic interpretation of correlations that are complex, non-specific or with ambiguous causality
Conclusion (1)

The biopsychosocial model is basically a formulation of common mental disorders through the *juxtaposition* of separate neuroscientific, psychodynamic, cognitive and social *interpretations* with *no* provision of any specific ontological and epistemological explanation for mental disorders is at best a *hypothetic* model which does not have the epistemological capacity to make claims on the aetiology or pathogenesis for mental disorders.
The hermeneutic analysis (semantic dualism and non-reductive pluralism) of the correlations between the biological, psychological and social discourses promotes a more informed *understanding* and *explanation* of common mental disorders without reducing illness experience into artificial diagnostic categories and aetiological speculation offered by the biopsychosocial model.
The biopsychosocial model continues to be a useful approach although its optimal application in real life clinical practice requires the psychiatrist and mental health practitioner to increase the level of philosophical and hermeneutic attention in the task of formulation of the notion of the self hermeneutic analysis