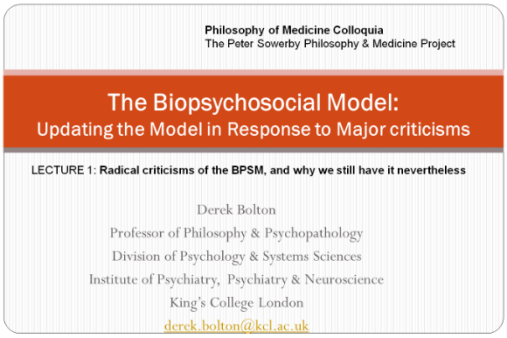
BPSM Colloquia DRAFT TEXT
Updating the Biopsychosocial Model

Derek Bolton. Philosophy of Medicine Colloquia, Guy's Hospital, October, 2019.



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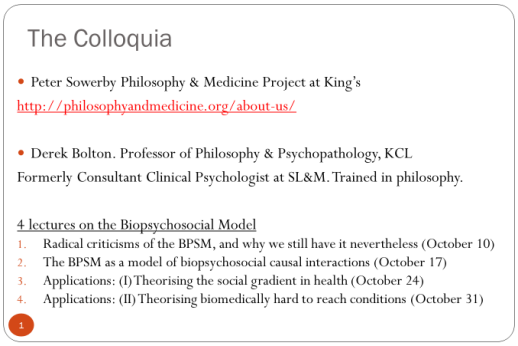
1. FIRST LECTURE: The Colloquia….



As Professor Bird has explained, these colloquia have the generous support of the Peter Sowerby Foundation. Peter Sowerby did his medical training at King's and Guy's in the 1950s.

Some context about myself…..

My first interests were in philosophy at Cambridge. My doctorate and first book was on Wittgenstein – who is yet another link with this hospital – there is a Plaque here remembering Wittgenstein's working here during the Second World War.

Following experience working in mental health services, wanting to be a clinician, I trained in clinical psychology, but also with my eye on philosophical issues in psychiatry: the nature of mental disorder; the nature of the science of psychopathology, and I have published on these questions over the years. My clinical work and clinical research has been mainly in child and adolescent mental health, including aetiology and treatment of anxiety disorders, PTSD and OCD. Some 10 years ago, becoming aware of the new social epidemiology, and delighted with cross-physical/mental health opportunities within the then new King's Health Partners, I became involved with community engagement in health and early prevention, working with community organizations and community maternity services at Guy's & St.Thomas's and King's College Hospital – and a very productive collaboration it has been.

Also since about the last 8 years I have been involved with NHSE's response to the apparent rise in adolescent mental health problems, at least the substantial rise in service demands, implementing existing and new workforce trainings in evidence-based therapies in London and nationally.

A few years ago my philosophical and other interests coalesced around the the Biopsychosocial Model.

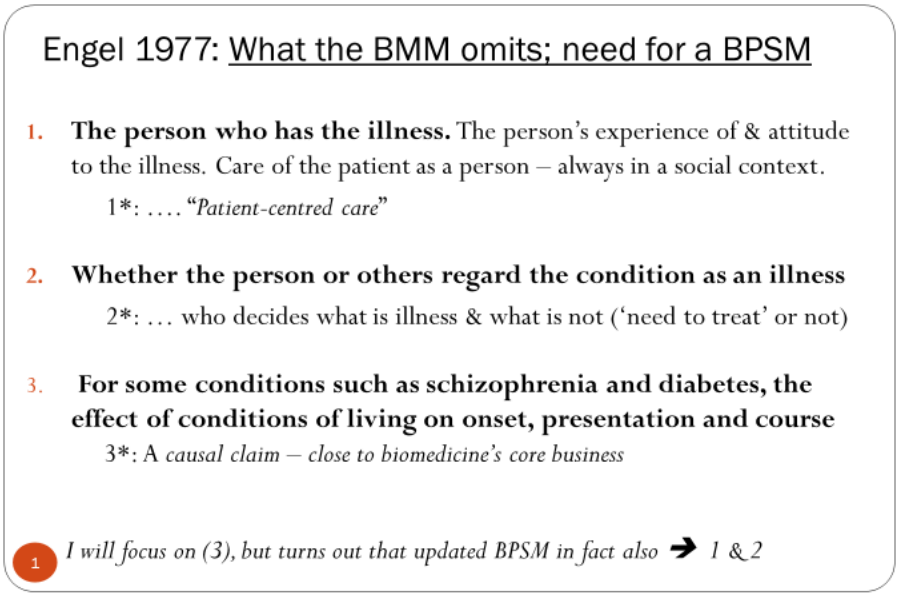
The occasion was publication in 2010 of a book by Professor Nassir Ghaemi, a psychiatrist at Tuft's, with the telling title: "The Rise and Fall of the Biopsychosocial Model". It was overall a powerful critique of the model, at least as it has come to be used, as being vague, without much content or practical utility. I already knew Nassir, and knew he was to be listened to. This was reinforced by seeing that very eminent commentators were agreeing and making similar criticisms of the model. On the other hand, the Biopsychosocial Model was much invoked, much referred to, and, the main thing, I was of course aware of the by then established efficacy of psychological therapies for some mental health problems, and for helping adjustment in physical health problems, and was seeing in the new social epidemiology the apparent importance of psychosocial factors in the etiology of many kinds of health problems, including physical health problems.

What intrigued was the combination of the model being so popular, so obvious to so many, with apparently clear emerging evidence, but this together with authoritative commentary saying it was radically flawed.

On other hand I had no special wish to defend a 40 year old model, so the real impetus for me was knowing that a lot of interesting issues about the nature of the biological, the psychological and the social, and the nature of causation, and the possibility of a paradigm shift in medicine and healthcare were covered under this heading of whether biomedicine needed to be expanded into biopsychosocial medicine. The issues were of course as much about physical medicine and biomedicine as about mental health and psychiatry, so I approached a likeminded medic, Grant Gillett at Otago: medic, neurosurgeon and like me, a student of Wittgenstein's philosophy. Some years later we published on the topic with Springer Open Access.

I am grateful for the opportunity to present this work here. I regret that Professor Gillett is not here to present with me – but Dunedin is far away, and health is not permitting. It means I come with knowledge of the philosophy of science, and psychology and mental health,– but very little detail of biology and no clinical experience of physical health. But this is in the room. I hope the lectures will contain points of interest, and there will be time for points and discussion including clinical relevance throughout.

2. Engel's 1977: What the BMM omits, need for a BPSM



The Biopsychosocial Model was proposed by George Engel in a paper published in 1997. Engel was a physician and a psychoanalyst – a not uncommon combination in the US at that time.

Here are some key points from Engel's main paper. He proposed a new model to replace the dominant biomedical model, which he saw as omitting much of importance – In my numbering 1-3. By implication, the new biopsychosocial model would make good these omissions.

The first is about the person who has the illness – this emphasis was part of a movement that came to adopt the title of "patient-centred care".

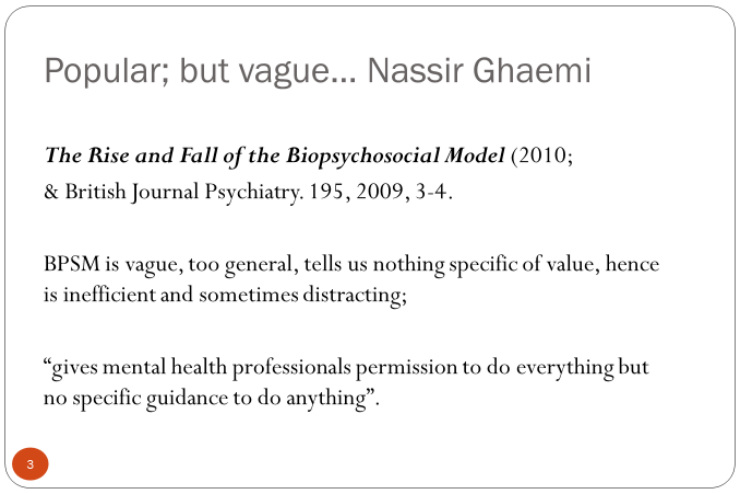
The second is about the person's role in deciding whether they are ill or not.

On the one hand the definition of illness may look like a philosophical question – but the decision has practical implications as to whether e.g. a person heeds public health advice, or whether they take symptoms to the clinic to be assessed, and whether they want treatment at all, or more treatment, or not.

I will be focusing the issues under the third heading, which explicitly engages with biomedicine's core business of determining causes and cures.

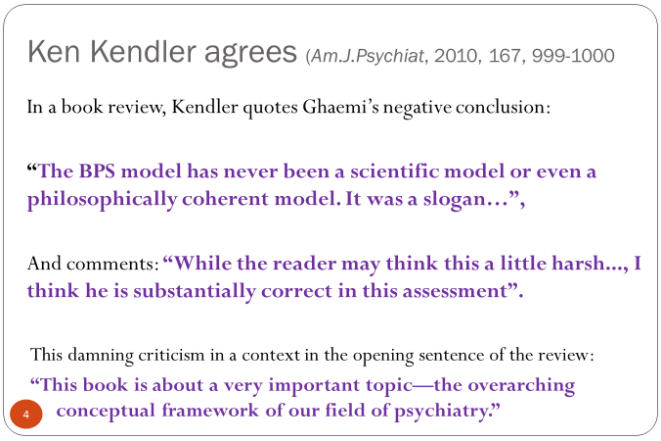
In fact also turns out that an updated BPSM in fact also implies 1 & 2.

3. Popular - but vague – Nassir Ghaemi



Over the decades since the Biopsychosocial Model has become increasingly popular and much invoked, but, as mentioned in my Introduction, it has more recently come in for major criticisms. As in Nassir Ghaemi's 2010 book. See here the criticisms that it is vague, over-general, says nothing specific… and is clinically useless.

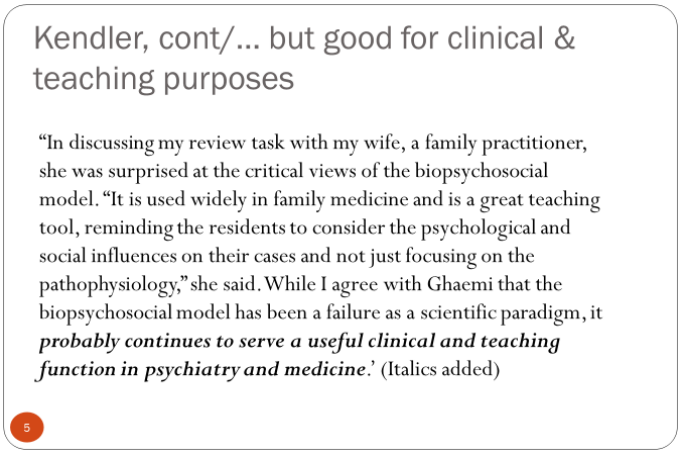
4. Ken Kendler agrees



And see this this review by a very eminent US psychiatrist, Kenneth Kendler – basically agrees: not scientific, not philosophically coherent… just a slogan.

But the big problem is also evident here. Kendler starts his review with the statement that the biopsychosocial model is "the overarching conceptual framework of psychiatry" – then goes on to agree with extremely negative conclusions as above.

5. Kendler, cont/… but good for clinical & teaching purposes

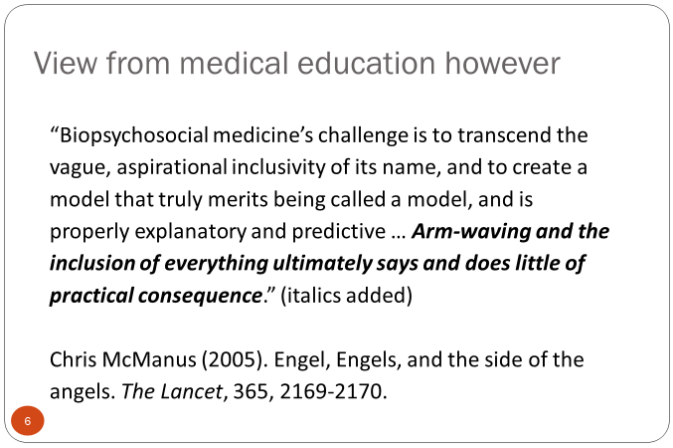


An extra twist, correctly intensifying the paradox, was provided by Professor Kendler's wife, working in primary care. The model is – after all – useful in the clinic, at least in primary care, and for teaching.

This being so notwithstanding all the things wrong with it!

Probably these things can't both be true.

6. View from medical education however



Here is an authoritative view from medical education. Chris McManus, at UCL, in 2005, reviewing a previous edited volume on the biopsychosocial model. Basically dismissive of the idea of biopsychosocial medicine – for reasons similar to Ghaemi's.

So, in conclusion, there is a major paradox in this literature on the biopsychosocial model.

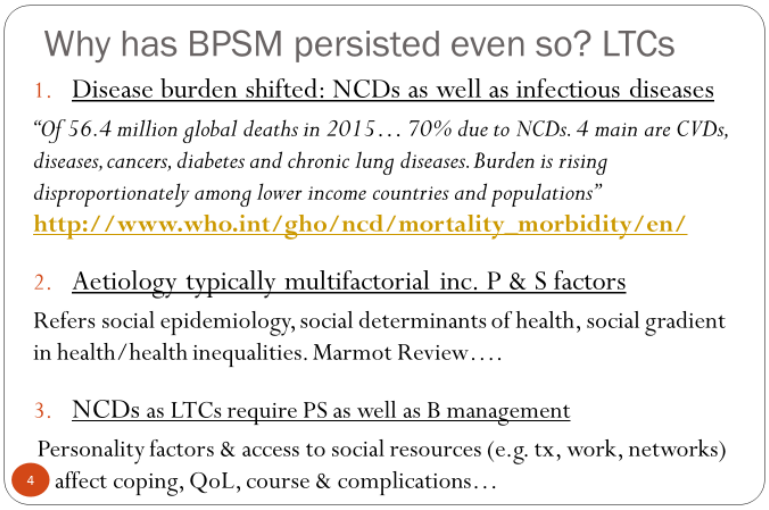
On the one hand it is very popular and much invoked, in teaching and in the clinic, thought by some to be the overarching framework of psychiatry, at least, perhaps even of medicine as such, or perhaps at least primary care.

While, on the other hand, it is being assessed as being vague, incoherent, unscientific and useless.

This is the paradox that intrigued me – to want to spell out and understand and hopefully resolve.

Looked at with a philosophical eye, it is likely that they signify tectonic size shifts in the conceptual foundations of medicine and healthcare. Hence the interest of reviewing the philosophical and scientific foundations of the model.

7. Why the BPSM has persisted even so? LTCs



As a first step, an important question is immediately raised, namely: "if the biopsychosocial model is so flawed and useless – why has it persisted?"

Nassir Ghaemi in his 2010 book has a political - with a small p - answer to this question, namely that the biopsychosocial model helped quieten down ideological disputes between the relevant medical orientations and related professions. This might well a satisfactory answer if you believe the model basically is otherwise useless. But I never bought that – being aware of – what I supposed – was emerging evidence in many aspects of health of the importance of psychosocial as well as biological factors.

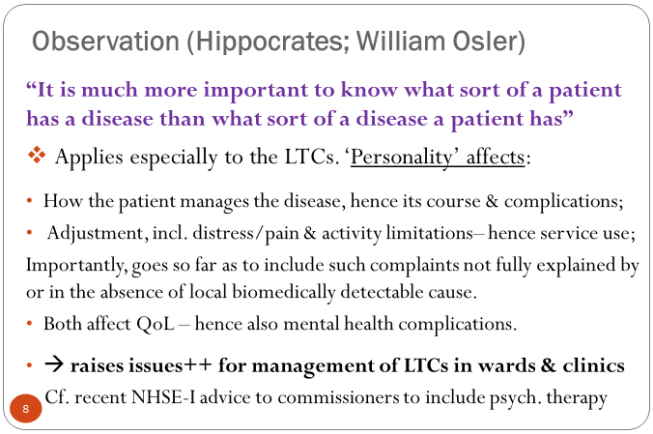
This is a very large topic in the health and clinical science, but I would say this briefly here, using the entry point of the increasing importance of long-term conditions. These are now a major cause of morbidity worldwide, and – crucially for the present purpose – their aetiology and management are thoroughly *biopsychosocial*.

Regarding aetiology, emerging evidence from social epidemiology such as Marmot's Whitehall Studies is well-known. Indices of lower social status, various kinds of social exclusion, are risks for many health conditions, physical and mental.

Regarding management of the long-term conditions, this typically involves the attitude of the patient to their illness and to treatment, self-management of the condition and treatment, in turn affecting risk of increasing severity and physical health complications, affecting also impact of the condition on quality of life, this in turn affecting risk of mental health complications. Biopsychosocial factors in the course of LTCs are apparent in the clinic, and in emerging evidence from controlled and uncontrolled trials.

This is linked to recent NHSE-I advice to commissioners to include IAPT in LTC pathways.

8. Observation (Hippocrates; William Osler)



The point here can be elaborated in terms of this famous medical advice which I've seen attributed to William Osler and to Hippocrates.

It is more important to know what sort of patient has the disease that what sort of disease the patient has.

It applies best to the LTCs, less to acute infectious diseases like Ebola. Because in the LTCs the illness, as chronic, has to be dealt with by the person, and the person has, all being well, an ongoing relationship with services.

Hence personality factors figure large, affecting how the patient manages the disease, this affecting course and complications, how they adjust to the condition, meaning partly psychological adjustment, and adjustment of their lives, values and obligations, seeking in these terms to maintain quality-of-life, the degradation of which carries risk of mental health complications.

In all these respects, LTCs carry with them this the similar challenges whether they are physical health conditions or mental health conditions.

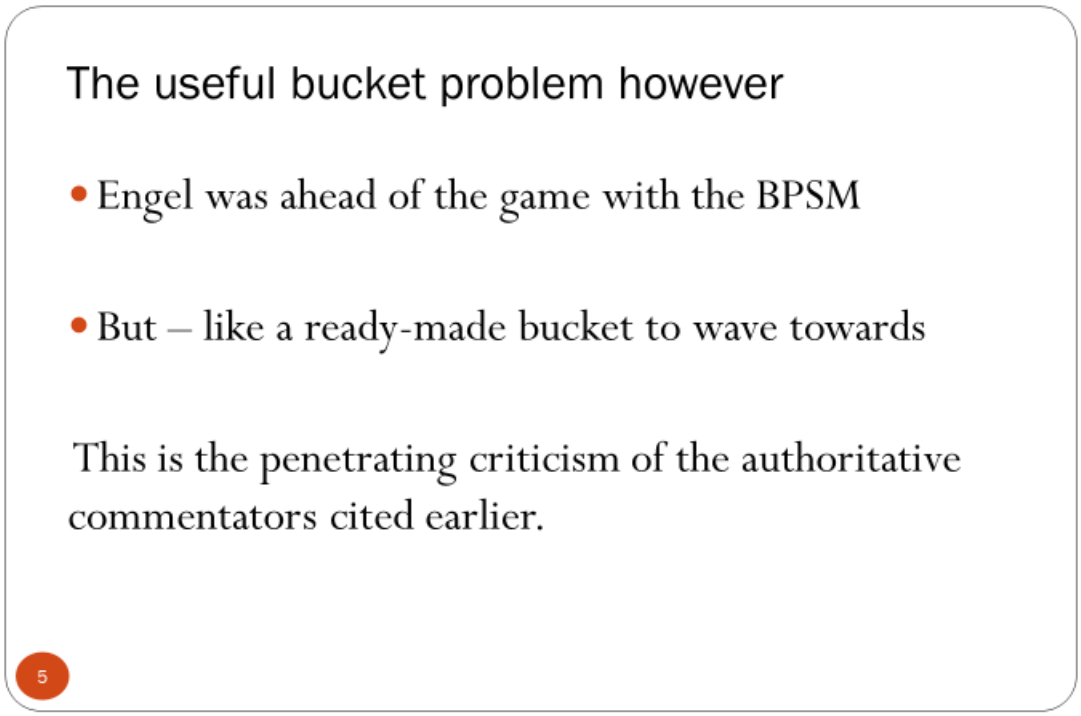
A crucial point – to which we will return throughout these lectures, is that, as well as depending on the severity of the condition itself, biomedically understood, *distress and pain and activity limitations* are also dependent on personality factors and social resources.

In some cases, distress and pain and activity limitations are not fully explained by a biomedically detected local cause. Or indeed, they may present when there is no biomedically detectable local cause.

A crucial point is that the psychosocial phenomena of distress and pain and activity limitations are the key drivers of service use.

As I mentioned, we will return to these issues in later lectures.

9. The useful bucket problem however



In short, evidence has been accumulating in epidemiological and clinical therapeutics over past few decades for complex biopsychosocial causal pathways in aetiology and course, and in order to convey this in brief – in a ward round or consultation – a throwaway comment can be made to the effect that "it's all biopsychosocial". But this is the *vagueness and lack of content* that is being picked by Ghaemi and other commentators.

So, by way of conclusion at this point, the accumulating research and clinical evidence of the importance of psychosocial as well as biological factors in the aetiology of many health conditions, especially long-term conditions, physical and mental, is a or the reason why the biopsychosocial model is much appealed to.

Nevertheless, as a generalization – something along the lines that all three factors are somehow involved in some complex way sometimes or always – the biopsychosocial model, arguably, does indeed look vague and useless.

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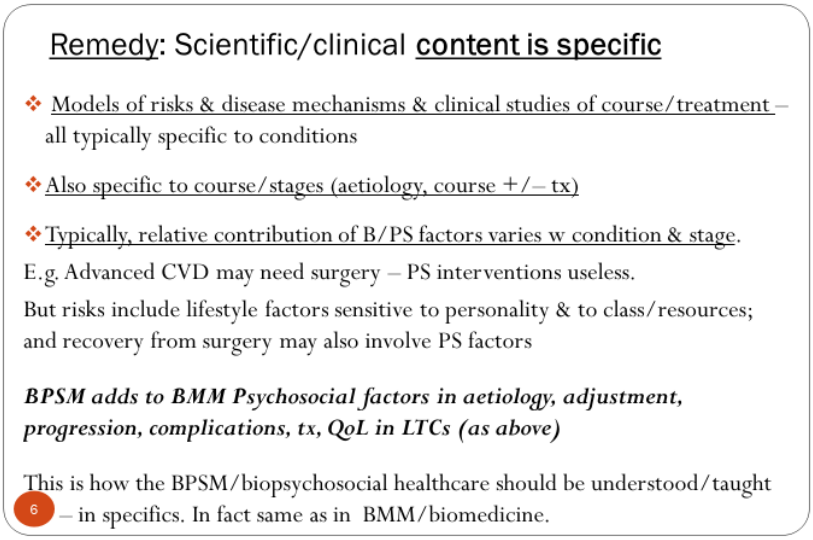
At this point, however, I think the obvious remedy is fairly clear – and it represents something a quick win…

10. Remedy: Scientific/clinical content is specific



The obvious way to go here, I suggest, is to see that the scientific and clinical content is ***in the specifics.***

Specificity is to conditions. But also to stages of conditions, from pre-onset risks, to early stage, through to progressive, or fluctuating or stable course, with or without treatment, and recovery.

Each stage may involve different causal mechanisms, and, important for the present purpose, different relative contributions of biological and psychosocial factors. So, for example, for cardio-vascular disease, aetiology involves all three kinds of factor, while advanced stage mechanisms and treatments may be biological only, while recovery and long-term management may again be affected by psychosocial as well as biological factors.

In this way there would be condition- and stage-specific models biopsychosocial models of, say, cardiovascular disease, diabetes, depression, or schizophrenia.

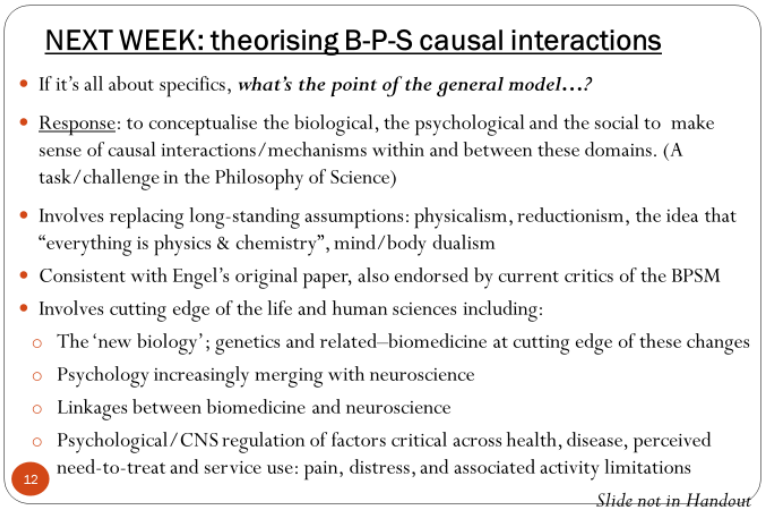
Condition- and stage-specific models would include what is known, with or more less certainty, or what is unknown, about etiological risks, management of risks, disease mechanisms, and about factors affecting post-onset course.

It can be noted that the biomedical model works in the same way: there is a biomedical model, and associated biomedicine, of specific conditions.

For some conditions, typically LTCs, the biopsychosocial model adds to the biomedical model information about psychosocial as well as biological factors involved in etiology and course, including treatment, adjustment and quality of life and service use.

I will pick up these issues in more detail in the third and fourth lectures on applications of the biopsychosocial model.

11. Late additional slide to end #1 – lead into #2



It may be helpful to trail next week's lecture. It will be on constructing a theory of biological-psychosocial-social causal interactions.

I will present this as a response to an obvious question raised by the solution suggested this week to the problem of scientific and clinical content of the biopsychosocial model – the problem of what it actually says.

I have said that the scientific and clinical content is in the specifics of conditions, and stages of conditions.

But this move obviously raises the question: *what then is the point of the general model?!*

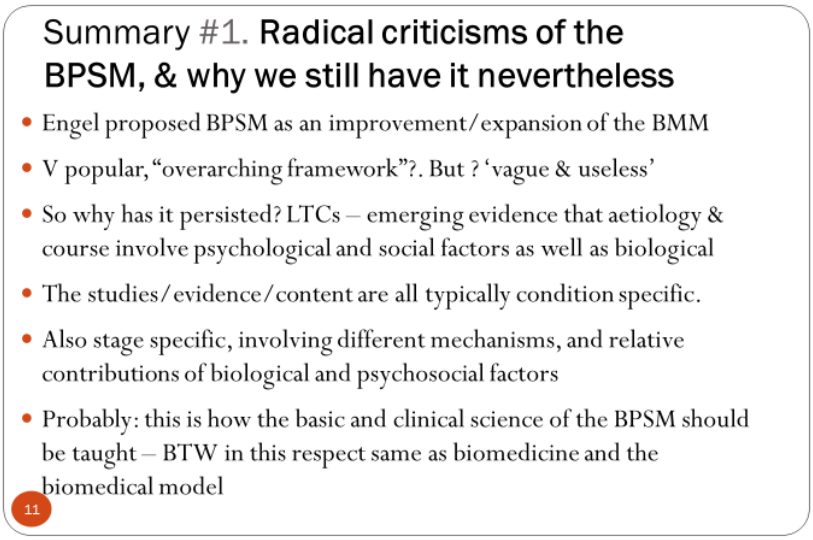
A reasonable response, I will suggest, is: to conceptualise the biological, the psychological and the social to make sense of causal interactions/mechanisms within and between these domains. // What is required to accommodate the current science and clinical phenomena is a theory of psychosocial causation that can be set alongside, and in interaction with, biological causation – as opposed to supposing that only material biological factors are causal, and psychosocial causes are problematic and not really real and not really causes. This, it turns out, Involves replacing long-standing assumptions: physicalism, reductionism, the idea that "everything is physics & chemistry", & mind/body dualism.

This approach, we will see, is consistent with Engel's original paper. It is also endorsed by current critical commentators of the BPSM, such as quoted previously.

It involves cutting edges of the life and human sciences including:

- The 'new biology'; genetics & related–biomedicine at cutting edge of these changes;
- psychology increasingly merging with neuroscience;
- linkages between biomedicine and neuroscience;
- psychological/CNS regulation of factors critical across health, disease, perceived need-to-treat and service use: pain, distress, and associated activity limitations – clinical implications that will be explored in the last lecture.

12. Summary #1. Radical criticisms of the BPSM, & why we still have it nevertheless



In this first lecture I have reviewed criticisms of Engel's proposed Biopsychosocial Model. I suggested that the content and utility of the model has to be understood and taught in specifics – by condition and stage of condition. In these specifics, the biopsychosocial model has scientific content and public health and clinical implications.

But this move raises the question "***what's the point of the general model…?*** *N*ext week…