Module:
Mental Health in the Commnunity

Week 1
Current conceptualisations of mental health

Topic 3
Diagnosis in psychiatry – Part 2 of 2

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Lecture transcript

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So I'm going to ask a question. What is schizophrenia? Now I know what I mean when I say 'you have a diagnosis of schizophrenia'. What I mean is that you meet contemporary diagnostic criteria for the disorder in terms of symptom, illness cause, and behaviours. And indeed, you will tend to have some of a set of very common kinds of symptoms. I also know that certain interventions may be helpful with a relatively high degree of certainty, the critical psychiatrist not withstanding.

However, the diagnostic label tells us rather little about you. So you might have the diagnostic label of schizophrenia and be a successful clinical psychologist, or you might have it and be living in a high secure hospital. And it also doesn't tell us a great deal about your biology, despite the very strong evidence about the heritability of receiving a schizophrenia diagnosis. So back to this idea-- there isn't a platonic ideal schizophrenia. It's a useful label.

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Now that label-- DSM-5's simplified definition says, at least two of: delusions, hallucinations, disorganised speech, disorganised or catatonic behaviour, and negative symptoms. So at least one of these symptoms must be present-- delusions, hallucinations, or disorganised speech. So those are core symptoms of the disorder. So two of those for a particular period of time tells us, 'continuous signs of a disturbance must persist for at least six months'-- that's in the DSM 5 definition-- 'during which the patient must experience at least one month of active symptoms', or less if successfully treated, 'with social or occupational deterioration problems occurring over a significant amount of time'. And finally, 'these problems must not be attributable to another condition'.

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So that's the ways that we define schizophrenia. But you can present with symptoms of schizophrenia-- identical symptoms-- to an emergency room; and in one world, you'd have one episode of this disorder, have a short course of antipsychotic medication, or perhaps even no medication at all, improve, and go back to your life. Those same symptoms can be the first presentation of a disorder where the individual never gets out of hospital.

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There are many problems with schizophrenia. These include a question: is there a point of rarity between schizophrenia and bipolar disorder, either in terms of phenomenology-- that is to say,

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the symptoms-- or in terms of genetics, or even other biological markers? The answer to which is, embarrassingly, not really. Is or are the symptoms of schizophrenia better captured in terms of categories or dimensions?

So some symptoms are found frequently in the general population. So lots of people without any diagnostic label, who never go on to have a diagnostic label, hear voices. And indeed, many symptoms are not in any way specific to a particular disorder. So hearing voices commonly occurs in other kinds of disorder including, for example, major depression, mania, and emotionally unstable personality disorder.

Another point worth making is in reality, treatments are largely symptomatic, rather than disorder specific. So anti-psychotic medications are quite effective for delusions and hallucinations but less so for thought disorder, whatever your diagnostic label.

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Now what about depression? I've mentioned previously, we all accept that depression is something that occurs to people. However, the nosology of depression has always been a mess, and that certainly goes back to the work of Kendell. So there are issues about how to validate diagnoses in the absence of pathological mechanisms, how to subcategorise depressive disorders, and how to deal with the fact that depression and anxiety often occur together-- sometimes at the same time, sometimes in sequential order.

There's a somewhat different problem. When does an understandable reaction to adversity, or a problem with living, become an illness? So the contemporary nosologies of depression remain, in the words of Cole and colleagues, 'working hypotheses'. In terms of depression, for example, categorical dimensional approaches have their place. And in fact, the severity of disorder may determine the best treatment approach.

However, there is evidence for a categorical difference between unipolar and bipolar depression-- that's to say, depression that occurs with or without episodes of elevated mood, which you can tease out from genetic studies and also is therapeutically relevant. Finally, there's psychotic depression, which is a particular manifestation of severe depression and responds to specific treatments-- notably, antipsychotics and ECT.

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There are many other controversies. So we have 'novel' diagnostic categories. Post-Traumatic Stress Disorder was, embarrassingly for me, invented after I started in psychiatry. Autism was almost unknown when I started working in psychiatry. Now it's almost as if all men have autism.

The next issue is the possibility of diagnostic creep. So the diagnosis of ADHD, for example, went up three times after the publication of DSM-IV so between DSM-III and DSM-IV partly because of slight changes in the diagnostic categorisation. And obviously, the underlying disorder, whatever it is, of ADHD certainly didn't increase three times just because a book was published. And I've already mentioned the rather worrying American concept of childhood bipolar disorder. There are a lot of concerns about the existence of over-diagnosis in psychiatry. This is, in fact, a book-length issue, And Joel Paris published a book with that title in 2013.

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Back to criticisms of mental illness. I mentioned critical psychiatry. I mentioned Szasz and The Myth of Mental Illness. And I mentioned R. D. Laing. Laing and Szasz are antipsychiatrists. We've talked about the critical psychiatrists. We've talked about the psychological critique of Kinderman and his recommendation for formulation-based approaches. We'll talk a little bit more about each of these in a moment. I'm going to introduce yet another approach, which comes from the heart of the mental illness establishment, if you like: from the National Institute of Mental Health and Thomas Insel. More

of this later.

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Laing-- in his 1960 book, The Divided Self, which every respecting psychiatrist of my generation read-- and indeed, I've got a paperback of it-- Laing argued that 'psychosis is not a medical condition but an outcome of the "divided self", or the tension between the two personas within us-- one, our authentic, private identity and the other the false, "sane" self that we present to the world'. And in other words, one reading of Laing is that 'mad' people are actually more sane than the rest of us. And that's perhaps not a coincidence that that links up with those slightly uncommon trends in thought that see madness as somehow something better. Because the 1960s, when Laing's flourishing, was an era that rediscovered shamanism.

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So Szasz-- his core argument is that mental illness doesn't exist, as we've seen. 'Proper illnesses', like diabetes and stroke, have a clear cut pathophysiology basis. And, Szasz notes, that's only been demonstrated for a small proportion of mental disorders. So for example, general paralysis of the insane-- Huntington's Chorea, myxoedematous madness. And so for Szasz, at best mental illness language is a metaphor.

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The critical psychiatrists are concerned about psychiatric practice when it depends on diagnostic classification and the use of psychopharmacology - so they don't like those. They identify the poor construct validity amongst psychiatric diagnoses, and they're sceptical about whether pharmacological agents-- such as antidepressents, mood stabilisers, and antipsychotic agents-- actually work. As a consequence, they dislike the use of psychiatric diagnoses to justify civil detention and don't think that the edifice of diagnostic constructs actually answer to much in a way of scientific knowledge of psychiatry.

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Now I've repeatedly mentioned psychological critiques and Kinderman, who advocates a formulation-based approach. So there's another extensive quote from Kinderman. 'We need a wholesale revision the way we think about psychological distress. We should start by acknowledging that such distress is a normal, not abnormal, part of human life, that humans respond to difficult circumstances by becoming distressed. Any system for identifying, describing, and responding to distress should use language and processes that reflect this position. We should then recognise the overwhelming evidence that psychiatric symptoms lie on continua with less unusual and distressing mental states. There is no easy cutoff between normal experience and disorder. We should also recognise social factors such as poverty, unemployment, trauma are the most strongly evidenced causal factors for psychological distress.' Although, Kinderman concedes, 'of course we must also note that other factors-- for example, genetic and developmental factors-- may influence the magnitude of individuals' reaction to these kinds of circumstance.'

So I think what he's saying is that distress is normal. It's on a continuum and caused by, precipitated by, life circumstances and social factors and merely modified by our biology. So what does he advocate? For clinicians working in multidisciplinary teams, the most useful approach would be to develop individual formulations consisting of a summary of an individual's problems and circumstances, hypotheses about their origins, and possible therapeutic solutions.

This 'problem definition formulation' approach, rather than a 'diagnosis treatment' approach, would yield all the benefits of the current approach without its many inadequacies and dangers. It would require all clinicians - doctors, nurses, and other professionals - to adopt new ways of thinking. It would also require the rewriting of most standard textbooks in psychopathology, which typically use DSM diagnoses as chapter headings.

I've already mentioned that in reality, the psychological formulation based approach is based on a research agenda that uses what I'd say are pseudo-diagnoses-- for example, CBT for psychosis. And in any case, it's not at all incompatible with psychiatric practice.

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The other difficulty with Kinderman's approach is one that was pointed out early on about psychodynamic approaches. This is about individual formulation, and it's almost a philosophical question: how can you learn, accumulate knowledge, if everything you do is based at the individual level? I'll leave that question hanging.

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I'm going to end by looking at a completely different way of looking at mental disorder which, as I've said, comes from the very heart of the psychiatric establishment. And this is the research domain criteria matrix, RDoC, which was proposed by Thomas Insel, who was then Director of the National Institute of Mental Health. Now Insel agrees with the critics of traditional diagnostic system, though from a very different perspective to Szasz, or the critical psychiatrists, or Kinderman. He's promoted a new framework underpinning mental health research, which goes by the acronym RDoC.

Top of the matrix is a line, which is about constructs - so genes, molecules, cells, circuits, physiology, behaviour, and self-report - and these are ways of looking at things. You can look at things through the lens of the gene, look at things through the lens of the cell, or through the lens of particular brain circuits, or indeed through the lens of self-report. The systems that he's interested in exploring have rather portentous and theory-laden names.

So five of them are: the negative valence system including, for example, fear, anxiety, and sustained threat; positive valence systems, which include, for example, initial responsiveness to reward attainment-- so what makes me go 'mmm!'; then cognitive systems -- for example, perception, memory; and then social processes such as social communication-- incidentally disrupted in autism -- and the understanding of self, which is quite profoundly disrupted in some other mental disorders; and finally, the arousal and regulatory systems, so arousal or circadian rhythms.

And as I said, you can look at each of these systems through the lens of different probes-- molecules, cells, physiology, behaviour, as an example. And the importance of RDoC is that essentially, NIMH is saying, we're going to fund research that uses the matrix, that looks for something in that way, rather than using traditional diagnostic categories (so the genetics of schizophrenia as defined in DSM-5).

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Let me try and explain the RDoC matrix. So what they're saying is that there are different levels that you can look at phenomena. So we can look at phenomena in terms of its genetics. We can look at phenomena in terms of the molecules that are altered in that particular phenomenon, in terms of cells or circuits, in terms of the behaviour that it's associated with. Now normally, in psychiatric research, we're investigating disease entities, like schizophrenia or anxiety disorder, as defined in diagnostic formulations.

But what you could do is try and break it down. Let's take an example. We know in many disorders we have problems of memory. So dementia is associated with problems of memory, that's a cognitive system. There may be genetics underlying the problem of memory. There may be specific molecules that are affected by memory, cells that are disrupted, or circuits - brain circuits - that are disrupted. And of course, there are certain behaviours associated with memory impairment. It may be that interventions at the molecular or cellular level, or even at the circuit level, can improve deficits in memory.

Or let's take another example, again, from cognitive domain. So perception: perception's a cognitive

function - we all are perceiving, as we're here today - and perception is disrupted in schizophrenia, so that a characteristic symptom of schizophrenia is hallucination-- that is to say, an abnormal perception without a legitimate stimulus underlying that perception. And that perception, that perceptive abnormality-- again, there is a genetics of perceptive abnormalities.

There are potentially molecular changes associated with perceptual abnormalities so that, for example, we know that drugs that block dopamine receptors are effective against hallucinations. So that's something that's happening at the molecular level. And the perception systems are sets of circuits. So those, again, may be disrupted.

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So the point about the RDoC matrix as I understand it-- and I'm a mere amateur at this-- is that instead of funding research based on clapped out diagnostic categories, like schizophrenia, you fund research based on drilling down into particular systems of interest -- like in the social process system, social communication.

So social communication's impaired in autism, for example. So can we look at social communication through the lens of genetics? Can we look at it through the lens of disrupted circuits?

One of the advantages of using that way of looking at things is is we can draw things together that might otherwise be missed. There is a slightly old-fashioned theory of schizophrenia, the dopamine theory of schizophrenia.

Now actually, on logical grounds, that's wrong because antipsychotics, which block dopamine receptors, are effective against hallucinations, whatever the diagnostic entity they appear in, whatever the cause. So you may be able to join things together that otherwise you'd miss if you have this different way of looking at things.

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There are already early outputs from RDoC. So a paper in The American Journal of Psychiatry, published in 2015 by Clementz et al., with a nice title-- 'Identification of Distinct Psychosis Biotypes Using Brain-Based Biomarkers.' Now that research found, in summary, no phenomenological 'point of rarity' between bipolar, schizophrenia, and schizoaffective disorder using DSM-5 criteria. So the symptoms are pretty evenly spread across those diagnostic categories, which are very longstanding, so go right back to Kraeplin over 100 years ago. But, they say, there was significant homogeneity of biomarker-based groupings. That's my summary. But I think it reflects what the authors say, reasonably accurately. And of course, there's an enormous amount of science behind that.

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So some conclusions about diagnoses in psychiatry. There are many limitations to contemporary diagnostic systems, and these have been very well-rehearsed. There is a concern that diagnosis is associated with stigma. So some people would argue that diagnostic labels are unhelpful because they're stigmatising. Others would argue that diagnostic labels are helpful because they're demystifying. You pay your money, you take your choice. However, there is a positive value of diagnosis, those values that I mentioned before-- an agenda for action, as a way of improving our understanding of things, and improving what we do to try and help the problems that we face, which I think cannot be easily dismissed.

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So I'm going to conclude here by some defences of psychiatry. The first comes from Slater and Roth, a later version of their textbook, written in 1969. So they say, 'If we forego the making of a diagnosis, we also forego all application of the extensive knowledge, which has been accumulated in the past.' So that's a point I've already made. 'This would,' they say, 'be sheer folly. We cannot willfully ignore

what is known. And if we wish to do so, we are under the psychological necessity of proving or believing that the knowledge is false knowledge or that it is irrelevant. If we refrain from diagnosis, we should be left in the individual case, without the help of general concepts.'

Now they go on to say, perhaps somewhat pompously, 'The wise physician never neglects the individual peculiarities of his patient. But he will first see how far he can be fitted into general patterns. And he will not mistake a quality which is characteristic of the group, such as thought disorder or auditory hallucinations, as either without significance or as something to be interpreted by the life history of that one patient alone.' So that's a 1969 writing by people who flourished somewhat earlier than that. So you'll notice the pronoun 'he' is used throughout, because then medical men were, of course, largely men.

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But let's bring it up to date. So here is Heckers, writing in the journal JAMA Psychiatry, 2015, which was introducing a set of articles, both for and against the RDoC framework. So we hear, 'The true value of a psychiatric diagnosis is the ability to predict course of illness, response to treatment, and ultimately quality of life and level of function in society. Good clinicians use diagnoses in the service of best patient care. They balance a paternalistic focus on outcome with respect of personal agency and encouragement for recovery.'

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Finally, Nick Craddock and Mynors-Wallis write, in The British Journal of Psychiatry, 2013, 'When used well, diagnosis is a key to assisting patients in making informed decisions about their care. It can ensure a patient gets effective help as quickly as possible and can benefit from the body of knowledge that's been built up from those who've had similar experiences previously.

Most people who seek help from mental health professionals want these benefits. When the patient consults a psychiatrist, they have a right to expect an expert diagnostic assessment and the psychiatrist has a professional responsibility to provide such an assessment and use it to guide available evidence-based treatments. This is not,' they say, 'an issue of personal choice of practitioners. It is a professional responsibility to the patient.' Incidentally, the title of their paper was 'Psychiatric diagnosis: impersonal, imperfect, and important.'