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Managing Editor
Jane Jervis

Administrator
Charlotte Hulme

Telephone
+44 (0)1782 734436

Email
jade@keele.ac.uk

Web
https://www.keele.ac.uk/kiite/publications/jade/

Address
KIITE, Claus Moser Building, Keele, ST5 5BG

The corridor of clinical uncertainty: using advanced clinical practice knowledge to make safe clinical decisions

David Jefferson, Lecturer (Education and Research) in Mental Health Nursing, School of Nursing and Midwifery

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Introduction

This paper offers a critical reflection about how undertaking an MSc Advanced Clinical Practice (ACP) programme, led to a greater understanding about how cognitive processes impact on making complex clinical judgements and decisions. Insights are offered about how using this understanding can ensure safe clinical decisions are made, especially if the clinician is stuck in the corridor of clinical uncertainty. Driscoll's (2007) 'what', 'so what', 'now what' model is used to facilitate this reflection. To maintain confidentially, all names have been changed when discussing the case study.

'What'

Children and young people with attention deficit hyperactivity disorder (ADHD) present with symptoms of inattention, hyperactivity, and impulsivity, and are typically referred for assessment and diagnosis to Child and Adolescent Mental Health Services out-patient clinics. I worked as an independent non-medical prescriber in one such clinic. In 2019, a young girl, Chloe, attended clinic with her mum, Sarah, to confirm a diagnosis of ADHD and to discuss the option of commencing medication, Methylphenidate Hydrochloride ('Mph') to treat her symptoms.

I am an experienced non-medical prescriber, possessing knowledge about the pharmacodynamics and pharmacokinetics of Mph, how it affects the body and how the body affects it. Chloe presented with all 3 symptoms of ADHD and pre-diagnostic testing also indicated ADHD. A clinical judgement of ADHD and clinical decision to prescribe MPH appeared a straightforward one.

‘So what’

At the time I saw Chloe in clinic, I was undertaking a module about advanced clinical decision-making as part of my ACP programme. I learned that Dual Process Theory contends that two key processes are employed by clinicians when making decisions: System 1 and System 2 (Marcum, 2012). System 1 thinking relies on tacit or intuitive knowing, such as pattern recognition from a previous experience, based on case histories and illness scripts (Bate, Hutchinson, Underhill and Maskery, 2012). I had seen over 1,000 children with ADHD in clinic, with similar case histories and illness scripts to those Chloe was presenting with. I was what could be termed ‘unconsciously competent’ at making clinical judgements and decisions about ADHD diagnosis and treatment. Intuitively, Chloe’s presentation matched all the other similar case histories and illness scripts: she had ADHD and could be commenced on medication.

This process of ‘satisficing’ oneself that the right clinical judgement has been reached, can result in cognitive bias. Crosskerry (2003) contends that cognitive biases are typically hidden and one such bias is ‘search satisficing’: once you are satisfied you have all the information you need to make a clinical judgement and subsequent decision, you stop searching. Had I stopped searching here, critical clinical information would have been omitted.

The advanced clinical decision-making module taught strategies for overcoming cognitive bias, and one such strategy was asking what is termed a ‘golden question’. At this point in the consultation – pen in hand, ready to prescribe Mph – I asked the question ‘Is there anything else I can help you with?’. Sarah replied that Chloe had recently been diagnosed with ‘5q121.1 deletion of chromosome 5’.

System 2 thinking is logical, deliberate, and rational compared to System 1 and utilised by clinicians if unable to use system 1. The added information did not fit with system 1 thinking. Not only did it not fit with any previous case histories, but it also contradicted what I had learned during training to become a non-medical prescriber, that ADHD is caused by an imbalance to dopamine and noradrenaline neurotransmitters, which Mph rebalances. I did not know if '5q1121.1' could cause Chloe's symptoms, and if medication would therefore be effective. In addition to the usual precautions when prescribing Mph, there was also the added complication of '5q121.1'.

To paraphrase a well-known metaphor from the game of cricket, I was stuck in the 'corridor of clinical uncertainty'. Sarah had bowled a 'googly' with the chromosomal information, and I was uncertain how to play it. Is the clinical judgement still ADHD? Were Chloe's symptoms caused by the chromosomal problem? Was the clinical decision still to prescribe Mph?

On reflection, switching from system 1 to system 2 thinking involves a conscious effort. I only became aware of this by participation on the ACP module. With Chloe, this happened by asking the golden question. Working in system 2, the search for new information to help answer my clinical uncertainties involved asking colleagues – Consultant Psychiatrists, pharmacists, other Non-Medical Prescribers, the Consultant Paediatrician who made the chromosomal diagnosis –if it was safe to prescribe MPH and would it be effective reducing Chloe's symptoms. Nobody knew the answer. I searched literature databases for the answers and found various articles about chromosomal abnormalities in general, but none that helped answer the clinical uncertainties.

Stuck in the corridor of clinical uncertainty, another approach to making advanced clinical decisions learned on the ACP module was that of shared decision-making. Using contemporary case law (Hughes, Crepaz-Keay, Emmett & Fulford, 2018), the options of how we could proceed were discussed with Sarah: doing nothing or completing cardiac tests, in readiness to prescribe MPH, even though the possible effectiveness of the medication on Chloe's ADHD symptoms was not known.

The latter option was agreed with Sarah and Chloe. System 1 and system 2 thinking were checked ('calibrated'), physical health screening tests ordered to ensure it was safe to prescribe Mph especially in relation to the unknown possible interactions between it and 5q121.1 deletion.

The clinical judgement made was that Chloe has ADHD secondary to 5q121.1 deletion of chromosome 5, and the clinical decision was to safely commence Mph. After dose titration, Chloe's ADHD symptoms became well controlled.

'Now what'

Leaving the corridor of clinical uncertainty was made possible by applying knowledge from the ACP module, enabling an advanced clinical judgement and decision to be safely made.

I no longer work in clinical practice, and instead teach nursing studies at a local Higher Education Institution. I use knowledge gained from participation on the ACP module, together with my reflections about what happened when I saw Chloe and Sarah in clinic, to teach pre-registration nursing students how to make safe clinical judgements and decisions, by recognising the role hidden cognitive process can play.

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