

Out of Hours

Common sense or cognitive bias and groupthink:

does it belong in our clinical reasoning?

“Groupthink enables non-evidence-based and bad organisational practice to continue and can increase clinical risk.”

You go to a medical equipment shop and buy a stethoscope and reflex hammer for £105. The stethoscope cost £100 more than the reflex hammer. How much did the reflex hammer cost?

If your answer to the above question was £5, you may have been using common sense (type-1 reasoning). If on the other hand your answer was based on analytical thinking (type-2 reasoning) your answer would have been more like £2.50. Like most successful biological organisms, we have evolved for economy of effort, to save energy. Type-2 reasoning requires more effort and more time than type-1, so we tend to apply common sense whenever we think it will suffice.¹ Type-1 reasoning is biased by our previous experiences of problem solving. A third-year medical student presented with a clinical problem may suggest a vast array of differential diagnoses, while an experienced clinician faced with the same problem may pattern match to the presentations of previous patients and assume only the most likely diagnoses.² Sometimes we even get ‘gut feelings’ (forward reasoning) about patients before we critically analyse the data before us.³ The experienced clinician’s reasoning will be much quicker, but also more likely to miss the occasional obscure diagnosis or novel problem-solving approach than critical analysis by a thorough well-studied medical student would. I learned to disregard Occam’s razor during my second week as an FY1 doctor, when a patient with trait anxiety and features of dependent personality disorder complained of acute chest pain and investigations revealed both acute coronary syndrome and a malignant gastric ulcer.

Another evolutionary weakness in clinical reasoning is groupthink. As social animals, sharing the consensus view can be more important to our survival than being correct. Expressing minority or unpopular views can lead to us being alienated or disliked, whereas sharing majority views can give us a false sense of security. This compounds the risk of us believing common sense, even when common sense is biased. Groupthink enables non-evidence-based and bad organisational practice to continue⁴ and can increase clinical risk.⁵ Examples include copying previous doctors’ prescriptions without critical analysis (for example, hospital

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doctors copying GP repeat prescriptions directly onto inpatient drugs charts or inpatient prescriptions onto to-take-out medications (TTOs), and GPs trusting TTOs without independent evaluation), prescribing based on nurses’ requests without clinically assessing ourselves, and carrying out focused examinations guided by information provided by other clinicians instead of thorough examinations based on our own history taking.

We are more likely to trust our colleagues when their clinical reasoning is similar to our own, and we are more susceptible to groupthink when working with people we trust. While it may be challenging or even annoying to have colleagues questioning the assumptions underlying our routine practice, or team members who are slow due to lack of, or reluctance to apply, common sense, their quirkiness may be of value to us and our patients. So next time you hear hooves, by all means think of horses first, but perhaps spare a thought for the cattle, sheep, goats, deer, and pigs too, if not the zebras, camels, hippopotamuses, rhinoceroses, and tapirs.

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DOI: 10.3399/bjgp15X683173

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