Cogito, ergo praedico (I think, therefore I predict)†

COMMENTARY

Peter Lepping

SUMMARY

I comment on a new overview of the treatment of delusional infestation. I focus on the challenges of communicating with a patient who has delusions and evaluate practical advice. I look at philosophical models to explain those communication problems as well as theories of delusional formation, and examine how these may help clinicians to understand and overcome those challenges.

KEYWORDS

Delusional infestation; prediction error; Habermas; communication; delusion formation.

In their overview on delusional infestation in the current issue of the *BJPAdvances*, Waykar and colleagues summarise the approach to delusional infestation and the interaction of psychiatrists with other specialties (Waykar 2021). They identify engaging and communicating with a patient who has delusions as a major challenge for clinicians. They describe antipsychotic medication as an effective treatment, which was again confirmed in the most recent systematic review on the subject published in 2020 (McPhie 2020). In their review McPhie and Kirchhof confirm the impressive response rates for first- and second-generation antipsychotics that had been reported previously (Lepping 2007). Although they acknowledge the lack of high-level evidence, they also confirmed that there is currently no evidence to favour any particular antipsychotic over another.

The main problem for clinicians is that, although they have significantly improved their knowledge about delusion formation, this has not helped communication with patients. Quite to the contrary, attempts to explain delusions biologically are likely to be met with anger and disappointment by a patient who is convinced that he or she is infested.

The importance of prediction in delusion formation

Looking at recent structural magnetic resonance imaging (MRI) and functional MRI studies as well as dopamine research and lessons from learning theory, Huber et al summarised the current evidence and hypothesised that delusions should be regarded as aberrant prediction processes (Huber 2020). What does this mean and how does it happen? There is evidence that an excess of dopamine in specific cortical networks contributes to abnormal salience attribution, which is considered to be the basis of delusion formation. This means that when interpreting sensory input, patients focus on unlikely rather than likely explanations for their experiences, thus making errors of probabilistic reasoning, or prediction errors. We all learn by making constant predictions about our environment. One could argue that in terms of learning we should rephrase Descartes' famous quote '*cogito ergo sum*' (I think, therefore I am) as '*Cogito, ergo praedico*' (I think, therefore I predict). These predictions are constantly tested and aligned with reality. In this process we correct prediction errors, which allows learning. Delusions are maintained when false predictions are not corrected.

Communication problems with patients who have delusions

Various models have been proposed regarding the best approach for patients with delusional infestation. These must take into account clinical, ethical and philosophical aspects. The limited available evidence for clinical approaches favours joint clinics between dermatologists or other specialists and psychiatrists. The ethical considerations are primarily with regard to gradual disclosures of diagnosis in order to optimise outcomes. This is particularly important in this patient group because the patient's high delusional intensity often causes a lack of capacity to make decisions about treatment. However, practical considerations such as patients' access to their clinic letters require a diagnosis. Some authors have advocated the use of neutral terms like 'unexplained dermopathy'. Other authors have been more sceptical and prefer the use of a variety of explanatory models in conversation with patients (Freudenmann 2009; Pearson 2012; Lepping 2015; Patel 2015). Either way, although it can be ethically acceptable to use principles of gradual or limited disclosure in the patient's best interest (Ryan 1995), if the patient lacks capacity, any such approaches obviously have to be in keeping with national medical council guidelines.

Peter Lepping, MRCPsych, MSc, is a consultant psychiatrist working in Wrexham Maelor Hospital for Betsi Cadwaladr University Health Board, Wales, UK. He has been working in liaison psychiatry since 2017, after 13 years as a community psychiatrist. He has a Masters in medical ethics and has won several research prizes. His research interests include violence and aggression, delusional infestation, capacity, medical ethics, translational research, systematic reviews and various other projects. He has been appointed Honorary Professor by Bangor University, Wales, and by Mysore Medical College and Research Institute, Mysuru, India. His first book on psychodermatology in clinical practice, co-edited with Anthony Bewley and Ruth Taylor, will be published in 2021.

Correspondence Professor Peter Lepping. Email: peter.lepping@wales.nhs.uk

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Relevance of Jürgen Habermas

Arguably, the most interesting aspect of communication is the philosophical one. It is important for the clinician to understand why a rational argument with their patient is so difficult. This answer should go much beyond a simple notion stating that the patient holds a false belief. Many philosophers have emphasised the importance of language for communication, but it was Jürgen Habermas who described 'communicative rationality'. He proposed that for successful communication, four basic principles have to apply in order to achieve successful and rational conflict resolution (Habermas 1992; West 2020):

- communication needs to intelligible, in other words it needs to consist of actual words and follow rules of grammar
- both people need to accept beforehand that whatever they are going to talk about is a legitimate conversation to have
- there has to be an understanding that both people believe whatever they are saying, and neither is merely trying to manipulate the other one
- whatever reasoning is used in the conversation, it needs to correspond with certain values and norms that both people agree on and understand.

Language is therefore not a disinterested building block: to communicate anything at all to another person we have to imbed our speech in normative constraints (West 2020). Communicative rationality assumes that as human beings we can get together and make rational decisions starting from a premise of similar values. In doctor–patient relationships this means that people can come together and have a conversation following the four principles set out by Habermas in order to come to a decision they can both agree on about how to move forward. Coming to an agreement normally implies tolerance for the other person's views and a pragmatic analysis. Looking in that way at the conversation with a person who is deluded, we can understand the fundamental problem that may ensue: the patient does not accept that the conversation is a legitimate conversation to have because, as far as they are concerned, they already know what goes on but may need to persuade the clinician of their view. This usually includes an unwillingness to look at the possibility that an alternative explanation exists, other than the one offered by the patient. In other words, even though the patient may truthfully believe their version of the truth to be true, clinicians may struggle to come to a common understanding with the patient by rational discourse. Habermas would argue that any mutual understanding is achieved on the basis of the shared presupposition that any validity claim agreed on can be justified, if necessary, by the use of reason (rational discourse). This is where problems often arise with a person who is suffering from a delusion, as their claim or belief cannot be justified by rational argument accepted by both parties.

The only solution is to accept pragmatically that a rational discourse, or as Habermas would put it, the use of communicative rationality, is not likely to lead to a conclusion. Clinicians are therefore left to either agree to disagree with a patient or to appeal to their tolerance for the other's point of view. They would agree to disagree in order to circumvent the problem of the legitimate conversation that Habermas pointed out. This is often the strategy used by psychiatrists to gain the trust of and ultimately engage the patient.

Other authors have used different approaches to explore ways of dealing with delusions and the communicative aspects of delusion to explain the communication difficulties with deluded patients, for example the pre-reflective abnormal self-awareness model (Gallagher 2003).

Practical applications

In practical terms, the clinician may actively invite the patient to trust that they have seen multiple other patients with similar problems before and have successfully treated them. Clinicians may appeal to associated symptoms such as agitation or anxiety, which can be treated with antipsychotics, or they may point out the fact that the patient has nothing to lose by trying a medication against what they perceive to be their better judgement. The philosophical contemplation allows us to see the difficulty in the communication and highlights how normal strategies of transparency and patient cooperation have to be adapted for this particular patient group.

Declaration of interest

P.L. has received consultation fees from Janssen not related to this manuscript.

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References

Freudenmann RW, Lepping P (2009) Delusional infestation. *Clinical Microbiology Reviews*, **22**: 690–732.

Gallagher S, Varela FJ (2003) Redrawing the map and resetting the time: phenomenology and the cognitive sciences. *Canadian Journal of Philosophy*, **33**(supp1): 93–132.

Habermas J (1992) Themes in postmetaphysical thinking. In *Postmetaphysical Thinking: Philosophical Essays* (ed and trans W Hohengarten): 28–53. MIT Press.

Huber M, Schwitzer J, Kirchle R, et al (2020) Delusion and dopamine: neuronal insights into psychotropic drug therapy. In *NeuroPsychopharmacotherapy* (eds P Riederer, G Laux, T Nagatsu, et al). Springer (https://doi.org/10.1007/978-3-319-56015-1_411-1).

Lepping P, Russell I, Freudenmann RW (2007) Antipsychotic treatment of primary delusional parasite doses: systematic review. *British Journal of Psychiatry*, **191**: 198–205.

Lepping P, Huber M, Freudenmann RW (2015) How to approach delusional infestation. *BMJ*, **350**: h1328.

McPhie ML, Kirchhof MG (2020) A systematic review of antipsychotic agents for primary delusion and infestation. *Journal of Dermatological Treatment* [Epub ahead of print] 22 Jul. Available from: https://doi.org/10.1080/09546634.2020.1795061.

Patel V, Koo JYM (2015) Delusions of parasitosis; suggested dialogue between dermatologist and patient. *Journal of Dermatological Treatment*, **26**: 456–60.

Pearson ML, Selby JV, Katz KA, et al (2012) Clinical, epidemiologic, histopathologic and molecular features of an unexplained dermopathy. *PLoS One*, **7**: e29908.

Ryan CJ, Moore G, Patfield M (1995) Becoming none but tradesmen: lies, deception and psychotic patients. *Journal of Medical Ethics*, **21**: 72–6.

Waykar B, Wourms K, Tang M, et al (2021) Delusional infestation: an interface with psychiatry. *BJPsych Advances*, **27**: this issue.

West S (2020) *Episode #143 – Jürgen Habermas – The Public Sphere. Philosophize This!* (www.philosophizethis.org/podcast/episode-143-transcript).