Letter to the Editors

Medicines concordance and game theory

Dyfrig Hughes

Institute of Medical and Social Care Research, Bangor University, Bangor, UK

de Almeida Neto and Aslani correctly highlight the importance of establishing a theoretical framework for testing the concept of medicines concordance in practice [1]. To this end, their suggestion of basing such a framework on the theory of psychological reactance provides a useful agenda for future research. An alternative theoretical framework is one based on game theory [2, 3]. During a medical consultation, a patient and prescriber may be considered to engage in a negotiation process to agree the 'terms of use' of the prescribed medicine (e.g. what are the potential benefits and harms?; is the dosing schedule convenient?). An agreement may be considered to lead to a concordant outcome. Disagreements may result in a discordant outcome where the patient is not certain that the prescriber understands and can respond to their needs, and the prescriber cannot be certain that the patient will adhere to the dosing instructions of their medication [2]. According to game theory, of which there are various forms (games), strategies leading to 'equilibria' – the most famous of which is the Nash equilibrium – represent the optimal outcome between two players. Although game theory has been applied to describe the decision-making dynamics between two parties in healthcare [3], further empirical work is required to test the theory against alternative models of concordance. This should assist in developing and interpreting research into whether concordance improves adherence and health outcome.

REFERENCES

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CORRESPONDENCE

Dyfrig Hughes, BPharm, MSc, PhD, MRPharmS, Reader in Pharmacoeconomics, Institute of Medical and Social Care Research, Bangor University, Dean Street, Bangor, Gwynedd LL57 1UT, UK.
E-mail: d.a.hughes@bangor.ac.uk