Clinical reasoning and therapeutic approaches of experienced osteopaths

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Abstract *Background:* Clinical reasoning refers to the decision-making processes which occur during practice. Over the last thirty years research in the health sciences has explored the clinical reasoning processes of a number of health professions such as medicine, nursing, occupational therapy and physiotherapy. As the osteopathic profession continues to grow, osteopaths are increasingly considered to be important providers of neuromusculoskeletal care. However, there has been minimal research into the clinical reasoning processes and therapeutic approaches used in osteopathy. The aim of this research was to explore the clinical reasoning processes of osteopaths in the UK, and to construct an explanatory theory of clinical reasoning in osteopathy.

Methods: A total of 12 UK registered osteopaths participated in this grounded theory study, which was situated in the interpretivist research paradigm. Purposive sampling was used to initially select participants. Subsequent theoretical sampling, which was informed by data analysis, allowed specific participants to be sampled. Data was collected from interviews with 9 participants, which were audio-recorded and transcribed. As the study approached theoretical sufficiency, data collection methods involved non-participant observation and video-recording of 3 further participants during a patient appointment, which was followed by a reflective interview prompted by the video-recording. The constant comparative method was used to code and analyse interview transcripts to construct a substantive theory to explain the therapeutic approaches and clinical reasoning of experienced osteopaths.

Findings: Participants took one of three distinct therapeutic approaches, termed; 'Treater', 'Communicator' or 'Educator' which characterised their overarching clinical behaviour. The approaches were developed from participant's conception of practice which was based on the antecedent conditions of their; educational experiences, professional and clinical experiences, personal values and beliefs, views of health and disease and professional identity. The three therapeutic approaches resulted in varying levels of patient involvement in the clinical reasoning process and consequently different therapeutic outcomes. Participant's approach to clinical reasoning ranged from 'practitioner-led' with a low level of patient involvement; 'mutual negotiation' with an equal level of patient involvement; or 'patient-led' with a high patient involvement. The process of diagnosis construction involved participants moving between hypothetico-deductive reasoning and pattern recognition and verification. Participants could adapt their therapeutic approach in response to the patient's preferences, expectations and the patient's ongoing response. The ability to adapt varied between study participants and was influenced by their conception of practice, working context and time factors.

Conclusions: The findings indicate that osteopaths have distinct therapeutic approaches to practice which influence the level of patient involvement in the clinical reasoning process. The clinical reasoning of the experienced osteopaths in this study extended beyond traditional diagnostic reasoning, and suggests that clinical reasoning in osteopathy is characterised as a continuous and dynamic process during patient interaction. These findings provide an explanatory theory of the therapeutic approaches and clinical reasoning of experienced osteopaths, which has implications for osteopathic clinical practice, education and research. Further research is required to determine the transferability of the substantive theory.