Clinical Naturopathy: In Practice

Jerome Sarris & Jon Wardle

ELSEVIER
Clinical Naturopathy: In Practice
Clinical Naturopathy: In Practice

Jerome Sarris
Jon Wardle
To my mother, Cynthia. Without her love and support my world would fall apart. To my sister, Ellena. Her familial enthusiasm, humour and creativity always inspire me.

– Jerome

For Kath and Molly.

– Jon
Contents

Editors viii
Preface ix
Contributors xi
Reviewers xiii
Acknowledgements xiv
Evidence-based clinical naturopathic practice xv

1 Gastrointestinal system 1
1. Diarrhoea-predominant irritable bowel syndrome and anxiety 2
   Jason Hawrelak
2. Gastro-oesophageal reflux disease and functional constipation 6
   Jason Hawrelak
3. Food intolerance 10
   Jane Frawley
4. Gastritis 15
   Sandy Davidson
5. Non-alcoholic fatty liver disease 20
   Ses Salmond

2 Respiratory system 25
6. Acute upper respiratory tract infection 26
   David Casteleijn and Tessa Finney-Brown
7. Asthma 31
   David Casteleijn and Tessa Finney-Brown
8. Chronic sinusitis 35
   David Casteleijn and Tessa Finney-Brown

3 Cardiovascular system 39
9. Cardiovascular disease and comorbid depression 40
   Jerome Sarris
10. Hypertension 45
    Jon Wardle
11. Erectile dysfunction 50
    Matthew Leach
12. Chronic venous insufficiency 54
    Matthew Leach

4 Nervous system 59
13. Bipolar disorder with comorbid ADHD 60
    Jerome Sarris
14. Chronic anxiety with comorbid insomnia 64
    Jerome Sarris
15. Clinical depression  
   Jerome Sarris  
   69

16. Migraine (nervous)  
   Phil Cottingham  
   73

17. Ageing and cognition  
   Christina Kure  
   77

18. Chronic fatigue syndrome  
   Stephanie Gadsden  
   81

5 Endocrine system  
   87

19. Hypothyroidism  
   Georgina Oliver and Tini Gruner  
   88

20. Generalised stress and fatigue  
   Jerome Sarris and Tini Gruner  
   95

21. Metabolic syndrome  
   Georgina Oliver and Tini Gruner  
   99

6 Reproductive system  
   105

22. Dysmenorrhoea  
   Jon Wardle  
   106

23. Endometriosis and menorrhagia  
   Jon Wardle  
   110

24. Fibroids  
   Susan Arentz  
   114

25. Polycystic ovarian syndrome  
   Jon Wardle  
   118

26. General menstrual complaints  
   Jon Wardle  
   122

27. Perimenopausal patients  
   Jon Wardle  
   127

28. Assisted reproduction (IVF)  
   Karen Martin  
   131

29. Subfertility  
   Amie Steel  
   135

7 Musculoskeletal system  
   139

30. Osteoarthritis and myofascial pain syndrome  
   Paul Orrock  
   140

31. Rheumatoid arthritis  
   Neville Hartley  
   145

32. Fibromyalgia  
   Leslie Axelrod  
   150

33. Tension and migraine headache  
   Daniel Roytas  
   155
8 Skin conditions 161
34. Allergies and eczema 162
   Kathleen Murphy
35. Acne vulgaris 166
   Amie Steel
36. Eczema and psoriasis 170
   Amie Steel
37. Hormonal acne 174
   Kathleen Murphy

9 Urinary system 179
38. Benign prostatic hypertrophy and erectile dysfunction 180
   Kieran Cooley
39. Recurrent urinary tract infections 184
   Michelle Boyd

10 Cancer 189
40. Bowel cancer 190
   Janet Schloss
41. Prostate cancer 195
   Janet Schloss

11 Paediatrics 201
42. Paediatric immune dysregulation 202
   Di Bowman
43. Nocturnal enuresis 207
   Di Bowman

12 Infectious diseases 211
44. HIV 212
   David Casteleijn

13 Complex conditions 217
45. Malvaria (pyroluria) 218
   Daniel Roytas
46. Pain management 223
   Justin Sinclair
47. Polypharmacy patients 227
   Justin Sinclair

Index 232
Editors

Jerome Sarris ND (ACNM), MHScHMed (UNE), AdvDipAcu (ACNM), DipNutri (ACNM), PhD (UQ)
Professor of Integrative Mental Health, NHMRC Clinical Research Fellow, NICM Deputy Director, Western Sydney University, New South Wales, Australia
Honorary Principal Research Fellow, Department of Psychiatry, The University of Melbourne, Victoria, Australia

Jon Wardle ND (ACNM), MPH (UQ), MHLthMedLaw (Melb), PhD (UQ)
Head, Regulatory, Policy and Legislative Stream, Australian Research Centre in Complementary and Integrative Medicine, Faculty of Health, University of Technology Sydney, New South Wales, Australia
Visiting Professor, School of Medicine, Boston University, Massachusetts, USA
Naturopathic Practitioner, Herbs on the Hill, Queensland, Australia
Preface

In our efforts to improve and modernise our seminal naturopathic text *Clinical Naturopathy: An Evidence-Based Guide to Practice*, we sought feedback from a variety of sources—including naturopathic students, naturopathic practitioners and lecturers within naturopathic programs in Australia and overseas. During these consultations the place of case studies repeatedly came up, in particular their importance in contextualising theoretical and ‘evidence-based’ information. Most of the people we contacted agreed on the importance of case studies, yet it was difficult to find agreement on how they would fit into the text.

Some suggested that the case studies were too descriptive and could be seen as summaries of the chapters, encouraging readers to follow the prescribed protocols rather than translate the chapter content into their own cases. Others highlighted how important it was to translate the chapter content into the context of real-life patients and to disseminate the wisdom that comes from practice, in addition to that which comes from theory and research. While some commended the ability of our case studies in the first edition to ‘fit’ nicely within the chapter topics, others felt conversely that this unnecessarily restricted the impact of the case studies by fitting them into topics, rather than treating them holistically as individual cases. While disagreement abounded, one thing became abundantly clear: case studies were far too important and complex to serve as supplementary material to place at the end of each chapter. The purpose of this text, therefore, is to recognise this importance and complexity of case studies and to ‘unshackle’ them from their supplementary role, developing them as important learning tools in their own right.

These cases are meant to illustrate the approaches of leading naturopathic practitioners in treating various conditions. They should not be seen as prescriptive—every case is unique after all—but they are meant to contextualise how research and theory have been applied in real-world settings by leading clinicians. Each of these cases is based on a real-world case, as treated by the author as a clinician. As such the text offers a great insight into the clinical decision-making processes of leading clinicians. By nature, this approach also highlights the breadth of treatment approaches in naturopathic practice (and clinical practice more broadly). These cases aren’t ‘right’ or ‘wrong’ (although you can observe how the patient is expected to progress) but simply illustrative of the approaches used by these leading clinicians.

However, it should also be noted that due to various limitations (e.g. word count and generalisability to an extent), more complex cases have not been presented. More importantly the purpose was to provide case studies that are most generalisable to common conditions seen in clinical practice. It is acknowledged that patients present with individualised conditions and that each case is unique and often complex; however, it was felt that the lessons from practice could be maximised by highlighting those cases most likely to be encountered by naturopathic clinicians in their practice. We have also provided expected follow-up protocols in each of the cases to guide readers as to what to expect throughout the patient journey, whether that journey be long or short.

Readers will probably also notice that references have not been included in this book. Instead, a bibliography of relevant resources has been provided to assist those...
interested in the theory and research underlying these case studies. This should also be viewed in the context that the aim of this book is to disseminate the wisdom drawn from practical experience (the importance of which is further discussed in the introductory chapter) and, in this sense, serves as a complementary approach to the theoretical and research focus of *Clinical Naturopathy: An Evidence-Based Guide to Practice* (and other naturopathic and medical texts). We have also included clinical pearls and clinical comprehension questions—provided by authors—to help readers better understand practical concepts that drive the author’s clinical decision making.

We believe that this text complements the existing literature, which often ignores clinical experience in favour of research and theory. By developing this text for use in addition to existing resources, we hope that readers can be exposed to a more rounded learning experience, ultimately delivering better clinical outcomes for patients.
Contributors

Susan Arentz ND, PhD, BHSc(Hons), AdvDipNat
Adjunct Research Fellow, NICM Western Sydney University, New South Wales, Australia
Lecturer, Endeavour College of Natural Medicine, New South Wales, Australia
Naturopath, Alana Healthcare for Women, New South Wales, Australia

Leslie Axelrod ND, LAc
Professor of Naturopathic Medicine, Department of Clinical Sciences, Southwest College of Naturopathic Medicine, Arizona, USA

Diana Bowman ND, PhD(c), MHSc, BHSc
Lecturer, Faculty of Health University Technology Sydney, New South Wales, Australia

Michelle Boyd ND, MHSc(HMed), BHSc(Nat), GradCert(HEd)
Medical Herbalist and Naturopath, Herbs on the Hill Clinic, Queensland, Australia

Joanne Bradbury ND, PhD(Nutritional Pharma), GradCertBiostats, BNat(Hons), BA(Psych)
Lecturer, Southern Cross University, Queensland, Australia

David Casteleijn ND, PhD(c), MHSc(HerbMed), BHSc(Nat)
Director and Clinician, Herbs on the Hill, Queensland, Australia
Lecturer, University of Technology Sydney, New South Wales, Australia

Kieran Cooley ND, BSc
Director, Research and Clinical Epidemiology, Canadian College of Naturopathic Medicine, Ontario, Canada

Phil Cottingham ND, BHSc, PGDip, GradDip
Principal, Wellpark College of Natural Therapies, Auckland, New Zealand

Sandy Davidson ND, PhD(c), DRM, MPH, AdvDipNat, DipNut
Program Leader, Nutritional Medicine, Endeavour College of Natural Health, New South Wales, Australia

Tessa Finney-Brown ND, MD, BHSc(Nat)

Jane Frawley ND, PhD
Lecturer, Public Health Faculty of Health, University of Technology Sydney, New South Wales, Australia

Stephanie Gadsden ND, GradCert(MH), BHSc(Nat)
Secretary (Board of Directors), International Network of Integrative Mental Health, New Jersey, USA
Director, Merge Health, Victoria, Australia

Neville Hartley ND, MPhil(Biomed), BHSc(CompMed)
Senior Lecturer, Health, Australasian College of Natural Therapies, Queensland, Australia
Contributors

Jason Hawrelak ND, PhD, BNat(Hons), MASN, MNHAA, FACN
Senior Lecturer, Complementary and Alternative Medicines School of Medicine, University of Tasmania, Australia
Visiting Research Fellow, Australian Research Centre in Complementary and Integrative Medicine, University of Technology Sydney, New South Wales, Australia

Christina Kure ND, PhD, BAppSci
Research Fellow, Centre for Human Psychopharmacology, Swinburne University of Technology, Victoria, Australia

Matthew Leach ND, PhD, BN(Hons), DipClinNutr
Senior Research Fellow, Department of Rural Health, University of South Australia, Australia

Karen Martin ND, MDEd, BTeach(Adult)
Director and Naturopath, Well2 Pty Ltd, South Australia, Australia

Kathleen Murphy ND, BA, BHSc
Naturopath, MamaCare Health Services, New South Wales, Australia
Lecturer, Naturopathic Medicine, Endeavour College of Natural Health and Australasian College of Natural Therapies, New South Wales, Australia

Georgina Oliver ND, MSc, BHSc
Research Assistant, Department of Psychiatry, University of Melbourne, Victoria, Australia

Paul Orrock DO, ND, MAppSc, GradCertHEd
Senior Lecturer, Health and Human Sciences, Southern Cross University, New South Wales, Australia

Daniel Roytas ND, MHSc(Nat), BHSc
Clinician, Ultima Healthcare, Queensland, Australia

Ses Salmond ND, PhD
Herbalist, Naturopath, Homoeopath, Researcher, New South Wales, Australia

Janet Schloss PhD, PGCNut, AdvDipHS, BARM, DipNut, DipHM
Research Officer, Surveys and Statistics Office of Research, Endeavour College of Natural Health, Queensland, Australia

Amie Steel ND, PhD, MPH, BHSc(Nat)
Postdoctoral Research Fellow, Australian Research Centre in Complementary and Integrative Medicine, University of Technology Sydney, New South Wales, Australia
Associate Director Research, Office of Research, Endeavour College of Natural Health, Queensland, Australia

/>
Reviewers

Ayesha Amos
GradCertEvidCompMed, GradCertHEd, AdvDipAppSci(Nat)
Naturopathic Practitioner, North Coast Medical Centre, New South Wales, Australia
Lecturer, Australasian College of Natural Therapies, Queensland; Southern School of Natural Medicine, Victoria; Endeavour College of Natural Health, Queensland, Australia

Rachel Arthur
BNat(Hons) (1st class), BHSc
Private Practitioner, New South Wales, Australia

Emily Bradley
MNM, BHSc(Nat), ANTA
Naturopath, Clinic Supervisor, Stable Health Clinic, Victoria, Australia
Lecturer, Southern School of Natural Medicine, Victoria; Endeavour College of Natural Health, Victoria, Australia

Karen Bridgeman
ND, DBM, PhD, MSc(Hons), MEd(HEd), MAppSci, DipHom
Director, Starflower Pty Ltd, New South Wales, Australia

Lisa Costa Bir
GradDip(Nat), BAppSci(Nat), MATMS
Private Practitioner, New South Wales, Australia
Lecturer, Endeavour College of Natural Therapies, New South Wales, Australia

Robyn Carruthers
MHSc, BEd, AdvDipNat, AdvDipHerbMed, MNZAMH
Deputy Director, Clinical and Research, South Pacific College of Natural Medicine, Auckland, New Zealand

Thomas Harris
PhD, BSc(Hons), AdvDip(WestHerbMed)
Herbalist and Neuroscientist, Complex Health Management, Queensland, Australia

Michael Thomsen
ND, DBN, MSc
Medical Herbalist and Naturopath, Tasmania, Australia

Nicole Quaife
BHSc(Nat)
Senior Lecturer, Nutrition and Nutritional Medicine, Laureate International Universities, Victoria, Australia
Introduction
Evidence-based clinical naturopathic practice

Jon Wardle and Jerome Sarris

The practice of naturopathy is developing from a traditional healing art into an evidence-based practice. As we stated in the preface to the first edition of Clinical Naturopathy, the increasing focus of evidence-based practice in the clinical application of naturopathy need not come at the expense of its intrinsic core principles. However, the constraints of a textbook project of that magnitude necessitated that the evidence base of the text focused on evidence from documentary sources—largely research papers but also traditional texts. We recognise that this approach had limitations. While the text reported in detail the clinical research evidence base for naturopathic practice, the insights drawn from clinical expertise garnered from years of practice were missing. With this case study book we hope to remedy this gap by providing examples drawn from the clinical experiences of leading practitioners to contextualise evidence within the practice setting.

These clinical insights are important to evidence-based practice. The ‘father’ of EBM, David Sackett, warned against the dogmatic application of EBM, noting that:

... good doctors use both individual clinical expertise and the best available external evidence, and neither alone is enough. Without clinical expertise, practice risks becoming tyrannised by evidence, for even excellent external evidence may be inapplicable to or inappropriate for an individual patient.
Introduction

Without current best evidence, practice risks becoming rapidly out of date, to the detriment of patients.\(^2\)

Indeed, the EBM triad holds the best available clinical evidence, clinician expertise and respect for a patient’s values and beliefs as three equally important aspects (see Fig. 1). At a clinical level, the defining features of real EBM are: making ethical care of the patient the top clinician priority; demanding individualised evidence in a form that both the clinician and the patient can understand; being characterised by expert judgement rather than mechanical rule-following; and sharing clinical decision making with patients via meaningful conversations.\(^3\) The understanding of EBM as originally intended by David Sackett therefore guides the discussion of cases presented in this book.

**Figure 1:** The evidence-based medicine ‘triad’

Evidence-based medicine and naturopathic practice

EBM is an often poorly understood and maligned concept. Although only recently formalised, the concepts and principles of EBM have a long history, with the documented espousal of EBM principles (including the first documented description of a clinical trial) dating back at least to the writings of noted 10th century Islamic physician Avicenna—writings that went on to dominate Western medical training for more than 650 years.\(^4\) In medicine, placebo controls were used in research as early as 1784, when a control was employed to explore (and later disprove) the medical effects of magnetism, a popular therapeutic system of the time,\(^5\) but their political use predates their clinical use, being used by progressive Catholics in the 16th century to discredit right-wing exorcisms.\(^6\) However, although many conflate EBM with the randomised controlled trials (RCTs) that often form a significant and influential part of EBM, there is much more to EBM than RCTs.
Naturopathy has often been held to have long had a turbulent and tumultuous relationship with EBM. Critics within the naturopathic profession have sometimes posited that EBM cannot coexist with naturopathy’s philosophical and methodological underpinnings. External critics have used similar arguments to suggest that naturopathy has little validity in contemporary evidence-based health practice. Both arguments are incongruent with the reality of EBM, and proponents putting such arguments forward have bastardised the EBM concept to push forward their own vested interests. In truth, EBM aligns with the safe, effective and competent practice of naturopathy (or indeed any other health practice), and the notion that traditional knowledge or philosophies and scientific process cannot coexist is absurd. EBM is neither the bogeyman many detractors would paint it out to be, nor is it the rigid, inflexible system that many EBM ‘proponents’ (who, in reality, are not supporting real EBM at all) hold it to be.

What is evidence-based medicine?

The concept of EBM simply focuses on ensuring that clinical decisions about individual patients are made on the basis of the most up-to-date, solid, reliable, scientific evidence. Sackett’s longstanding simple definition—still employed by most—is that ‘EBM is the conscientious explicit and judicious use of the current best evidence in making decisions about the care of individual patients’. All parts of this sentence are important. ‘Current best evidence’ is just that—not perfect evidence but simply the best up-to-date current evidence (not evidence that is out of date). And evidence extends not only to that found in academic journals but also that observed through clinical practice, uncovered through clinical expertise and even that found in longstanding traditions of safe and effective practice. This evidence must be applied in a ‘conscientious’ (i.e. being careful and thorough in all aspects of care), ‘explicit’ (i.e. clinicians must be open, clear, up-front and transparent with patients in all aspects of their care) and ‘judicious’ (i.e. good judgement and common sense must be used in all clinical decision-making processes). And of course, it must be applied to ‘individual’ patients—including being respective of individual patient beliefs and preferences.

Evidence-based medicine in practice: key concepts

The key concepts of EBM in practice are not dissimilar to the concepts of good naturopathic practice. Indeed, many naturopathic clinicians will recognise many of the following concepts from their own practice. In practice, EBM requires that treatment be individualised, be clinically justified, follow proper procedures and focus on patient-centred outcomes.

Individualised treatment

One of the principal tenets of EBM is the encouragement of individualised treatment. Although EBM is often decried as encouraging ‘cookbook’ medicine, this arises from the discredited ‘mechanical rule’ interpretation of EBM; real EBM actually
encourages an individualised approach. The confusion possibly stems from EBM’s use of protocols and clinical algorithms, which are often erroneously conflated as being 'cookbook' medicine. However, whereas ‘cookbook’ medicine provides a recipe of individual treatments that all patients within a subpopulation must be prescribed (for example, every patient with dysmenorrhoea must be prescribed Vitex agnus-castus), ‘protocols’ simply provide a standardised roadmap to treatment (for example, ensuring that: relevant differential diagnostic considerations are undertaken by performing relevant physical and diagnostic examinations; social and physical factors are taken into account; and all treatment groups have been considered). Similarly, EBM eschews the use of ‘shotgun’ approaches to treatment, whereby a prescription is provided that is so broad that it covers all possible bases, without differentiating what the patient actually needs. ‘Shotgun’ approaches to care not only expose patients to unnecessary clinical (i.e. potential interactions) and financial risk (which can result in resource constraints that make patients deter other necessary care), they compromise quality continuity of care by making it difficult to ascertain which individual aspects of their treatment are actually working, making ongoing patient management problematic. They are also—to put it bluntly—an affront to the expertise of the clinician because they ignore the clinician’s important role in tailoring an individualised prescription for the patient that is most likely to result in improved outcomes. They are also rarely as effective as individualised approaches to care.

These ‘shotgun’ approaches are also worryingly present in many ‘wellness’ prescriptions—not true wellness prescriptions but those commercialised programs advising unnecessary use of a multitude of supplements without clinical justification—prescriptions that vary little between individual patients. In some cases, providing even seemingly benign unnecessary treatment can result in side effects that may mimic clinical symptoms. For example, one published case study reports of a British woman who had been unsuccessfully seeking treatment for unexplained peripheral neuropathy for 10 years as a result of a preventive ‘shotgun’ prescription approach to wellness that was not individually prescribed or well monitored, and contained high doses of pyridoxine. Her symptoms immediately subsided on cessation of pyridoxine-containing supplements but after considerable resources had been expended on finding a cure for her symptoms.

Clinical justification for treatments

An obvious extension to individualised treatment is clinical justification of all treatments. While the importance of using individualised evidence has been discussed above, the clinical justification for treatment extends beyond clinical reasoning to ensuring that practice is also ethical. This principle is based on ensuring that treatments are derived in a ‘conscientious, explicit and judicious’ manner, not merely those based on personal preferences or interests. In naturopathic practice, practice dispensaries and the preponderance of availability of new diagnostic tests offer the following two case studies in how this may apply to clinical practice.

Proper procedures

Although ‘mechanical rule following’ is discouraged in real EBM, this does not mean that proper procedures and protocols should be discarded. EBM even acknowledges that the procedures and processes may differ between differing levels of expertise.
Introduction

underlying cause remains essential, it is unlikely to occur if the patient’s immediate concerns are not also met. A patient presenting with an acute upper respiratory tract infection that is the result of reduced health (or ‘vitality’) caused by poor dietary and lifestyle behaviours is unlikely to comply with the dietary and lifestyle changes prescribed if their acute symptoms are not adequately treated. Pain (for example, dysmenorrhoea, migraine or rheumatoid arthritis) may have underlying triggers and exacerbating factors that can reduce the incidence, severity and impact on the patient long term but also require symptomatic relief during acute episodes.

What about traditional evidence?

Traditional knowledge, although often viewed as ‘lower’ on the evidence hierarchy, is not discounted by EBM entirely. Traditional evidence based on empirical observation over hundreds, sometimes thousands, of years can also be logically viewed as an extension of the ‘clinician’s experience’ part of the EBM triad. However, there is growing international recognition of traditional medical knowledge as a source of evidence, as indicated in the World Health Organization’s most recent *Traditional Medicine Strategy* document. International efforts are underway to codify this traditional knowledge for greater recognition; for example, both traditional Chinese medicine and chiropractic diagnoses are being standardised for incorporation into the upcoming version of the *International Classification of Diseases*, which will give diagnoses from these medical traditions the same weight as ‘Western’ medical diagnoses. In Australian courts traditional use and practice is already recognised as a form of admissible evidence, albeit at a lower level than scientific evidence. Similarly, traditional evidence is also accepted by the Therapeutic Goods Administration, with protections against its fraudulent use (such as a requirement for documentation of multiple generations of use before allowing traditional evidence claims to be used so that traditions cannot be ‘invented’ for commercial or marketing purposes).

Traditional knowledge is, in many ways, starting to be ‘validated’ by science. For example, while only now are the conditions in which a plant grows being recognised as a factor in their medicinal quality, this was long a part of herbal practice. In his 17th century treatise Nicholas Culpeper wrote of the conditions required for herbs to have optimal therapeutic qualities, noting in colewort’s case that ‘they rather delight to grow in shadowy than sunny places’. Modern science is only now confirming why brahmi displays different therapeutic qualities depending on when it is harvested in relation to annual monsoons, as it has been known to do for centuries. There are also important practical reasons for recognising tradition. The ban on kava (*Piper methysticum*) in many countries was triggered via hepatotoxicity occurring in rare cases. This primarily involved solvent-extracted German preparation using the incorrect plant parts and cultivars, rather than using traditional aqueous extractions of the rootstock of high-quality kava cultivars. While the implementation within different countries varies—and varies considerably—groups such as the World Health Organization are recommending more recognition of traditional medical knowledge, not less.

However, a reliance on traditional evidence alone is not enough in EBM. Just as an over-reliance on scientific evidence alone can result in practice being ‘tyrannised
by evidence’, or an over-reliance on clinical expertise alone can result in practice becoming ‘rapidly out of date’, relying solely or too much on traditional evidence can present its own problems. Real EBM requires the totality of all forms of evidence to be considered in every clinical encounter.

Limitations and problems in EBM

There are noted limitations in the application of EBM. Clinicians may denounce that, in many cases, the highest form of empirical study—the clinical trial—may not accurately reflect the true practice of therapies. There is a valid criticism that clinical trials too often measure the effects of therapies in a way it is never going to be used (many trials require the intervention be used exclusively or be applied to strictly controlled criteria rather than individual clinical judgement) in patients who are never going to be seen in a clinic (many trials exclude multimorbiditity and patients with numerous health risk factors unrelated to the clinical condition being investigated) by physicians who will never actually practise (many trials do not use grassroots practitioners but researchers) in settings that don’t actually exist (many trials take place in research centres rather than functioning clinics). Such criticisms are particularly pertinent to the naturopathic community, where the variation between a research setting and the ‘real-world’ practising environment may be particularly pronounced.

However, such criticisms do not stem solely from the naturopathic community. While naturopathic medicine often attracts enough criticism and controversy to highlight issues first—serving somewhat as an ‘EBM canary in the coal mine’—few therapies are found to be effective using narrow, dogmatic, reductionist approaches to EBM. For example, orthopaedic and sports medicine seems to have an even lower evidence base than the naturopathic therapies recently included in the Australian private health insurance natural therapies review.

Even primary care itself cannot survive this bastardised approach to EBM. Stange and colleagues draw attention to what they term the ‘primary care paradox’, noting that the complexities of primary care itself mean that its benefits can be obscured by dogmatic application of EBM—as studies that focus on narrow controlled interventions in patients that do not reflect the complexities, comorbidities and confounders observed in ‘real-world’ clinical practice. As such, the benefits of primary care can differ depending on which evidence is being interpreted: trial evidence fairly consistently shows that primary care clinicians deliver poorer quality care than specialists; evidence from the Medical Outcomes Study, however, shows similar outcomes for specialists and generalists but at a lower cost for generalists (representing higher value); in studies of patients with chronic somatic and/or mental illness, shared care between specialists and generalists is optimal; ecological studies find that a greater supply of generalists and a lower supply of specialists is associated with greater quality of care on multiple disease-specific quality measures; ecological studies show that more primary care is associated with better population health with a lower cost and greater equity.

However, in many cases, EBM is incorrectly perceived to align only with the first form of evidence (trials), potentially obscuring the value of primary care. However, the other forms of evidence listed are becoming increasingly important in clinical
and policy decision making and have also been suggested to more accurately reflect the true principles and practices of naturopathic medicine. It should be noted that such developments may not—yet—be fully embraced by the conventional medical community (the well-publicised methodological flaws with recent National Health and Medical Research Council (NHMRC) reviews of natural therapies is an obvious example). There have also, undoubtedly, been problems with misappropriation of EBM by various vested interests, from dogmatic fervent proponents pushing their own incorrect narrow interpretations of EBM, to drug companies influencing the research process (via development of new research tools, publication bias and invention of new ‘conditions’ requiring treatment) to better push their own products via the EBM model. However, these problems aren’t due to EBM but to its misappropriation and distortion by a vocal and influential minority.

The perceived conflict between naturopathy and EBM—is it really reflective?

The perceived conflict between naturopathic medicine and EBM appears to be a side effect of the political tensions between naturopathic and conventional medicine professions rather than a true conflict or inability for naturopathic medicine and EBM to align. The use of narrow and dogmatic (and false) interpretations of both EBM and science as blunt weapons against naturopathic medicine by ideological opponents (for example, by labelling them pseudoscientific and incompatible with conventional medical principles) have probably lent credence to this perceived conflict. Some commentators within the naturopathic profession have been equally unhelpful, suggesting that any move to embrace EBM by Australian naturopathy, for example, is driven solely by political factors and that the idea of EBM aims at bypassing or minimising the philosophical and methodological foundations of naturopathy. Some commentators have attempted to further dissociate EBM and complementary medicine as two distinct, separate and opposite entities—suggesting, for example, that the upsurge in the use of integrative therapies by conventional medical practitioners is linked to their defence of clinical autonomy in the face of pressures to practice an ‘approved’ version of EBM.

However, the notion that the underlying principles, philosophies and practices of naturopathic medicine are too philosophically divergent to engage with EBM does not alter the reality of perceptions of grassroots naturopathic practitioners and students. Australian studies of naturopathic students and practitioners have suggested that practitioners critically engage with both traditional and scientific forms of evidence and with information that both supports and is critical of traditional naturopathic practices. This aligns with Boon’s early Canadian work that suggested that naturopaths viewed treatment through a spectrum of scientific and holistic worldviews and were able and willing to be more holistic or more scientific depending on patient needs, as well as international studies of the naturopathic profession’s attitudes towards EBM. It also aligns with data that suggests complementary professions in Australia—particularly Chinese medicine and naturopathy—are becoming more actively engaged and successful in health and medical research funding streams such as those of the NHMRC.
Where is the evidence?

The largest problem facing naturopathic medicine with respect to evidence is not the negative evidence suggesting that naturopathic medicine does not work but the paucity of evidence at all. Even more pressing is the need for research around the practice of naturopathy, which can highlight the valuable role of the naturopathic clinician in delivering care rather than placing emphasis on the role of the therapy (e.g. herbal medicine, acupuncture, nutritional supplement) itself. However, it is not the role of the scientific community to build naturopathy’s evidence-base; it is the naturopathic community’s obligation to build research capacity among its own clinicians and to build the evidence-base itself. After all, no-one else can be expected to do it for us. Not only does this ensure that the naturopathic profession has a foundation upon which to base EBM but it also ensures that the evidence-base is truly reflective of naturopathic practice and respectful of naturopathic traditions. This does not necessarily mean that clinicians should conduct their own projects, although this should be encouraged, but that a culture of involvement in ongoing projects should be supported, whether that be involvement in surveys, focus groups, trials or initiatives such as practice-based research networks (e.g. the Practitioner Research And Collaboration Initiative in Australia or the Naturopathic Physicians Research Institute in the United States). If the naturopathic community does not establish its own evidence base, the vacuum will be filled by the misinformed assumptions of sceptical opponent groups, whose views will be lent more legitimacy than they deserve solely due to the fact that no opposing point of view has been established. This does not support the naturopathic professions and it does not support good patient care.

Conclusion

EBM, though often cast as a ‘bogeyman’, is simply an extension of good clinical practice. The fear of embracing EBM in naturopathic practice appears to be related to an oversimplified and narrow interpretation of EBM by both naturopathic proponents and opponents—an interpretation that bears little resemblance to the true principles of EBM. EBM is a far more complex concept than we tend to give it credit for: ‘evidence’ is not synonymous with ‘RCT’—many other forms exist; scientific knowledge is not a substitute for traditional knowledge and vice versa; and traditional knowledge is not an ‘inferior’ or ‘undeveloped’ form of knowledge. Science and tradition can coexist in EBM. They have different aims and structures and make different contributions to knowledge. Professional opposition to EBM in the naturopathic profession has no philosophical or traditional base. In fact, it could be argued that only by embracing EBM can naturopathic clinicians truly embrace their own philosophies and traditions.

Acknowledgement

This chapter is a summary of an invited talk prepared for and initially presented by Dr Jon Wardle in 2013 at the New Zealand Association of Medical Herbalists Conference in Dunedin and later updated and presented at the International Congress of
Naturopathic Medicine (Paris), Woodford Folk Festival and various naturopathic colleges around Australasia, Africa, North America and Europe. A version of this talk has also been published in the *Australian Journal of Herbal Medicine*.

**REFERENCES**


1

Diarrhoea-predominant irritable bowel syndrome and anxiety

Jason Hawrelak

PRESENTATION

A 34-year-old female presents with persistent abdominal discomfort, bloating and diarrhoea. Upon further questioning she states that on some days she does 3–4 bowel motions daily (Bristol Stool Scale type 6); other days only once. There is no blood in the stool, only occasional mucus. Gut symptoms are present on 3–4 days each week. She also complains of anxiety and believes stressful episodes worsen her irritable bowel syndrome (IBS) symptoms. Symptoms have persisted since a case of traveller’s diarrhoea (and subsequent antibiotic treatment) she picked up in Bali 2 years ago.

Diagnostic considerations

While her symptom pattern does meet the Rome III criteria for IBS and, more specifically, diarrhoea-predominant irritable bowel syndrome (D-IBS), in cases like this a number of investigations need to be performed in order to rule out other potential diagnoses. Stool culture and parasitology (or faecal multiplex polymerase chain reaction (PCR)) needs to be performed to ascertain if any gastrointestinal pathogens remain from the original bout of traveller’s diarrhoea in Bali. For accurate results this procedure may need to be done on three separate occasions, unless you use PCR, in which case a single sample will suffice. To rule out sugar malabsorption, breath testing (lactose and fructose) should be performed. Glucose breath testing should also be done to check for small intestinal bacterial overgrowth (SIBO). The patient should also be assessed for coeliac disease (note: to ensure an accurate test result, the patient needs to eat the equivalent of at least four slices of wheat bread daily for 6 weeks prior to coeliac testing). It is important to note that testing may find that a patient has multiples diagnoses such as SIBO, fructose intolerance and coeliac disease. Also be aware of alarm signs that require immediate referral such the presence of blood in the stool, unexplained weight loss, concurrent anaemia and a family history of bowel cancer.
In this case, the results of the investigations did not alter the diagnosis, which remained D-IBS, and more specifically postinfectious D-IBS.

One of the primary aims of treatment is to ensure gastrointestinal symptoms are reduced. This was achieved by using carminatives and antispasmodics (*Mentha x piperita*, *Lavandula* spp. and *Carum carvi*) and an antidiarrhoeal agent (*Myristica fragrans*). *Lactobacillus plantarum* 299v has also been found to decrease IBS symptoms—most notably abdominal pain and bloating—as well as decreasing stool frequency.

To address the enhanced visceral perception, *Carum carvi* and *Mentha x piperita* were used in combination. The proprietary herbal preparation Iberogast has also been demonstrated to reduce visceral hypersensitivity.

Turmeric was used to address the low-grade colonic inflammation that occurs in IBS and particularly in postinfectious IBS. *Lactobacillus plantarum* 299v administration has also been found to reduce inflammation in the colon.

The underlying dysbiosis was addressed with galacto-oligosaccharides (GOS)—the prebiotic of choice in IBS. GOS reduce IBS symptomatology while simultaneously improving the gastrointestinal tract (GIT) microbiota. GOS supplementation has also been found to have an anxiolytic effect.

*Schisandra chinensis* was used as an adaptogen to help modify the stress response. It has also been used in traditional Chinese medicine to treat diarrhoea and to ‘calm and quiet the spirit’.

The patient’s comorbid anxiety was treated with relaxing nervines (*Lavandula angustifolia* and *Myristica fragrans*) and a nervous system trophorestorative (*Hypericum perforatum*). *Piper methysticum* is another herbal option that
can be very effective in helping to manage anxiety. Daily meditation was also recommended as a stress-minimisation strategy.

- *Hypericum perforatum* (St John's wort) and *Myristica fragrans* (nutmeg) also have a long history of use in treating diarrhoea.

### Expected outcomes and follow-up protocols

IBS symptoms should substantially improve within 4 weeks (often earlier). Hence, follow-up should be scheduled in this time frame. The herb mix could be adjusted if the response was deemed inadequate at 4 weeks. If the patient was not responsive to treatment after 8 weeks, it would be worthwhile considering allergy testing (both IgG and IgE) to investigate the possible role of food allergies in their symptomatology. It should be noted, however, that a strict exclusion diet may be necessary to accurately ascertain which foods or food constituents are problematic in individual patients. A low-FODMAP diet could also be implemented, depending on the patient’s initial response to treatment. It would also be worth considering the role of gluten in this case—even if coeliac testing was negative. Gluten sensitivity has been found to be a contributing factor to IBS symptoms in some patients. Unfortunately, there is no conclusive test for gluten sensitivity. Diagnosis is based on their response to a strict gluten-free diet and subsequent gluten challenge.

Both low-FODMAP and gluten-free diets have been found to negatively affect levels of beneficial bacteria in the GIT. A low-FODMAP diet should therefore be considered a short-term intervention until work on the underlying cause of the IBS symptoms and visceral hypersensitivity is completed. Healthy FODMAP-containing foods can then be slowly reintroduced into the diet. The patient’s response to the gluten-free diet and gluten reintroduction will determine the length of time such a diet should be followed. If it is going to be followed long term, it is essential to provide dietary counselling to ensure an adequate amount and variety of dietary
fibres and microbiota-nourishing foods are consumed daily to maintain a diverse and healthy GIT microbiota.

While symptoms can improve relatively quickly once treatment has begun, the underlying visceral hypersensitivity and colonic inflammation will take a number of months of ongoing treatment to heal. Once healed, most patients find they can eat a broad range of foods again without getting symptoms. These foods include fructose- and sorbitol-rich fruits, onions and legumes. Nervines and adaptogens provide restoration over the long term, so their use should be continued until both the practitioner and the patient are confident that they are no longer needed.

**Clinical pearls**

- IBS is still a diagnosis of exclusion. Ensure you’ve ruled out other possible diagnoses before assuming a patient has IBS.
- Always ask patients if there are any food triggers that they’ve observed for their gastrointestinal symptoms. These observations can give insight into what food constituents (if any) are causing problems for them.
- SIBO should be suspected in patients where bloating and distension are key symptoms—especially if these occur within 30 minutes of meals.
- Try to ascertain if there was an initiating event for their symptoms or what was happening in their lives around the time symptoms started. This can provide further insight as to the cause of gastrointestinal symptoms in that patient.

**Expert CONSULT**


**BIBLIOGRAPHY**


