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Looking outside the square: The use of qualitative methods within complementary and alternative medicine—The movement towards rigour

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Summary This paper explores why qualitative research in the field of complementary and alternative medicine (CAM) is underused and, when used, done so defensively. It argues that qualitative research methods can encompass the complexity of CAM and identify richer veins for research exploration. The rigorous application of holistic research methods, used non-defensively, can only benefit CAM and the knowledge base of science.

Doing and thinking about research of health care practices, referred to as complementary and alternative medicine (CAM), is not a straightforward and comfortable task. At a fundamental level, the study of health and medicine (and their research methodologies) confronts head-on the challenge to understand and represent the 'objective material reality' as well as the 'performed-situated-interactive-reality' — or how medicine is actually done. A researcher could, for example, find a method that assesses health or disease through measuring levels of pathological factors in a person's blood *and* their sense of ease or acceptance of their health carer's approach. Both aspects — accurate diagnosis of pathogens and the relationship between patient and practitioner — are recognised as vital to recovery from illness.[1—3] Mainstream biomedicine researchers habitually analyse health and disease within the human body predominantly as a mechanistic process that they can unravel with more and more precise (and inevitably reductive) analytic tools. Such an approach fits within established 'scientific research methods', but excludes much of what many would view as the underpinnings and central perspectives of CAM practice.[a]

The development of medical research methodologies has, at least in part, been a result of concerns about the intrusion of CAM practices in health care,[4] and may help to explain why CAM has not always emerged from intensive 'scientific' examination unscathed. The poor fit between CAM and the Randomised Control Trial (RCT) (the preferred method of inquiry for biomedical research) is evident by the difficulty to discern the complexity of CAM interventions due to the non-standardisation of its treatments; the complexity of the conditions for which the client seeks its treatments; the difficulty of recruitment and randomisation; the placebo issue and, of course, the importance of the patient—provider relationship.[5] Sauer[6] has this to say about the inadequacy of an RCT within a CAM setting:

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[a] The context of person with the disease, the interacting relationship between mind and body, and the individualised presentation of disease within this person at this time — are examples.

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> ''*The reductionist approach has successfully identified most of the components and many of the interactions but, unfortunately, offers no convincing concepts or methods to understand how system properties emerge...the pluralism of causes and effects in biological networks is better addressed by observing...multiple components simultaneously...*''.

The 'pure' science view is that measuring changes across a population has far more meaning than information about changes in an individual. The inevitable perspective of the health practitioner (of whatever persuasion) is what Pietroni calls the knowledge of the Particular Humanist which is *personal, value-constituted, partisan, non-rational and political*[7(p25)] — a primary focus on the patient being treated. An RCT aims to be *impersonal, value-free, precise and reliable*[7(p25)] and speaks to the analytic scientist. Combining and valuing these two 'knowledges' have to enlarge our understanding of health, disease and how to intervene for the best. In the clinical trial undertaken by the first author[b] the quantitative data indicated that there was a trend to improved menstrual regularity on the part of the population who received an acupuncture intervention (although this trend was not 'statistically significant'). Further qualitative analysis, however, revealed, three women who suffered from polycystic ovary syndrome (PCOS) experienced natural menstrual cycles and full periods for the first time in many years (or in one case in her lifetime). This example throws into sharp relief the difference in what can be learnt from different research methods.

Regardless, conventional biomedical models emphasise the centrality of the biological sciences in defining what is a medical issue as well as the form of care necessary to treat it. Pathology in biomedicine is one which is bounded by the physical body. As Rothman[8(p34)] argues ''The Cartesian model of the body as a machine operates to make the physician a technician or mechanic. The body breaks down and needs repair; it can be repaired in the hospital as a car is in the shop; once 'fixed', a person can be returned to the community.'' Alternatively, CAM tends to emphasise multiple sciences[9] as well as negates the Cartesian mind/body dualism. CAM therapies employment of vitalist explanatory constructs which are said to influence organic, emotional and behavioural disorders is also a stark contrast to the conventional biomedical approach and one that does not sit neatly within the discourse of biomedicine as well as approved methodological approaches.

Globally, disciplines across the health and social sciences are grappling with methodology in an environment constrained by research funding agendas and a resurgence of the politics of evidence. In this context, the application of an established set of methodological techniques is often applied to the empirical problems — elevating the commitment to the methods over the area of research. In this sense, methods are determining the empirical problem — an issue raised within the social sciences as 'abstracted empiricism'.[10] The debate surrounding the politics of evidence and what value qualitative methods have in health research are also addressing matters of the place of CAM within the biomedical community.

Yet, on reflection there are some obvious reasons for CAM's embrace of quantitative research methods. The pursuit of legitimacy and professionalisation in essentially conservative health care systems encourages, or even demands, the pursuit of research for 'evidence based practice' as biomedically defined. This is certainly the case in Australia where there is a lack of a strong innovative driver of health research where hospital services dominate discourse about health care. Conversely, countries such as the United States have witnessed the advent of federally sponsored CAM research. The Institute of Medicine (2005) and the National Institute of Health reveal that millions of dollars are channelled into various areas of CAM. This increased funding combined with the development of the National Centre for Complementary and Alternative Medicine (NCCAM) has resulted in a push towards measuring the efficacy of the treatments.

The practice of abstracted empiricism is further compounded by the increase of biomedical practitioners (doctors and nurses) adopting and 'integrating' CAM to respond to (1) consumer demand; and (2) realising that biomedicine is not particularly effective in treating an array of chronic ailments.[11] These integrative practitioners are bringing their background in quantitative research to bear on/in CAM. For instance, Angell and Kessierer[12] state that ''*it is time for the scientific community to stop giving alternative medicine a free ride. There cannot be two kinds of medicine — conventional and alternative. There is only medicine that has been adequately tested and medicine that has not, medicine that works and medicine that may or may not work*''. This excerpt, from an editorial published in the *New England Journal of Medicine*, illustrates a willingness to incorporate CAM into 'medicine' but only if there is scientific evidence. Accordingly many CAM researchers have, in self-defence, used RCTs in their research.

The pursuit of legitimation and the defensive use of the RCT are further exemplified through the Traditional East Asian medicine (TEAM) part of CAM. TEAM, as practised in the West, is, for obvious reasons, greatly influenced by China and there has been much recent critical analysis of China's slavish adoption of 'Western' medicine, for example, Greta Young's[13] discussion of the attacks on traditional Chinese medicine (TCM) within China — attacks grounded in an evidence-based approach to medical practice and quantitative research methods (although People's Republic of China (PRC) research in TCM is much criticised). The PRC has seen the commercial value of the 'scientific' validation of its medicine leading to greater access to wealthy Western markets. This has distanced East Asian medicine from its origin: ''*in the traditional Chinese view of the world there is only process...effective action no longer depends on knowing how things are but rather on knowing in which direction they are moving*''.[14(pp127–128)] Quantitative research methods have few means of 'knowing' (and measuring) movement, in addition to the fixed 'things' that are more easily computed.

What the hierarchy of research methods (that privileges the quantitative) has done is reinforce and delimit professional boundaries and particular ways of practising medicine. The limitations of relying solely on RCT evidence

[b] As yet unpublished.