Using evidence in practice

Abstract
This feature examines the success of evidence-based practice (EBP) and the associated Cochrane Collaboration. It seeks to identify critical success factors associated with the way that both initiatives have been marketed. The simplicity of the original message used by each initiative allowed for subsequent assimilation of nuances and variants. Two implications for health librarians are highlighted; recognition that EBP is simply the embodiment of one world view and that many others may make a useful contribution and the need to craft a simple message capturing the unique selling points of the profession. To create a unique contribution health librarians require a detailed picture from market research of user information needs.

Keywords: evidence-based practice, health information needs, knowledge transfer, marketing, publicity.

Evidence-based practice: triumph of style over substance?

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Introduction
One of the reassuring aspects of the evidence-based practice (EBP) movement is that gatherings of its most ardent supporters typically provide a forum for its most exacting autocriticism. Given the focus on appraisal of the available evidence this is healthy and exactly how things should be. Similarly, those who have been long associated with the production and consumption of evidence, in some cases over almost two decades, owe it to their principles to subject the movement itself to ongoing scrutiny.

Thus it was that, during a veritable evidencefest of the Evidence 2010 conference at the British Medical Association followed immediately by the Evidence Based Information Literacy event hosted by Susie Andretta in London in November 2010, that I found myself considering the enduring appeal of the EBP movement and, indeed, its critical success factors. Essentially the success of EBP could be attributed, at least in part, to marketing – that is marketing of two principal ‘products’. These products comprise the systematic review of randomised controlled trials (RCTs), championed by the Cochrane Collaboration,1 and the evidence-based medicine five-stage process, advocated by McMaster University.2 Of course these products have been further supported by more tangible outputs such as the Cochrane Library and the User Guides to the Medical Literature.3 However arguably these latter outputs can be conceived more as delivery mechanisms for the main products that I have chosen to highlight.

In a presentation several years ago, aimed at a gathering of rehabilitation professionals and researchers, probably located towards the more sceptical end of the continuum, I used a modern fable to illustrate the successful growth and diversification of the EBP movement. This fable drew upon analogies between the Cochrane Collaboration and the manufacturers of the world’s most famous soft drink.

A modern fable
‘Prior to the formation of Co– Co– multiple enterprises performed essentially the same task. Bringing such business concerns together into a ‘coca-wine collaboration’ allowed creation of joined-up working and development of a common product. The subsequent formation of a single international entity with an easily recognisable
logo stimulated further uptake and growth. To protect the identity and quality of the resultant product the Co–Co– organisation chose to emphasise exclusivity. It therefore standardised on a single version of the product. If the product did not contain the essential ingredient (Merchandise 7X for the soft drink/the ‘Gold Standard’ randomised controlled trial for the research enterprise) then it was to be judged an inferior imitation and thus to be rejected.’

The opening of this fable captures the decision of the Cochrane Collaboration to standardise initially on the RCT design, explicitly rejecting other study designs, in order to accelerate promotion of the product and to keep the message simple.

‘Over the years this initial position has been variously relaxed or eroded. The Co–Co– organisation now contributes to many related products; most of these have received widespread adoption and are consequently well-known in their own right. In the evidence domain these include both Sprite-ly health technology assessments and Fanta-stic guidelines.’

The fable thus continues by illustrating how the EBP movement has successfully built upon the firm foundation provided by the Cochrane Collaboration’s exclusive stance to go on to endorse other highly-valued evidence products. Finally the fable concludes by documenting the development of a more inclusive portfolio of activities:

‘The Co–Co– organisation has also experimented with different ingredients and different versions of the same essential product. So within the soft drink corporation there are now Diet versions; Caffeine-free versions; versions with Fruit and also Vanilla versions. Similarly within the evidence domain there is increasing acceptance of systematic reviews containing added Health Economics, Diagnostic studies or even with ‘fruitful’ inclusion of Qualitative Research.’

Interestingly, as a postscript, both Co–Co organisations have frequently encountered opposition – both for current activities and for activities with which they have been historically associated.4

Behind such an artfully contrived analogy lies the real point of the comparison, namely that over the years the marketing strategies of both organisations have been able to evolve from a basic and simplistic message to accommodate a more diverse and sophisticated portfolio. Yes the Cochrane Collaboration has survived because it possesses a fundamentally strong product which it can market but that is only one part of the ‘marketing mix’.5

Triumph of style?

Prior to the formation of the Cochrane Collaboration, and its subsequent worldwide marketing efforts, RCTs were an unglamorous offering of interest only to epidemiology nerds and the most die-hard ‘black belt’ researcher. By settling on the ‘gold standard’ RCT Ian Chalmers, and his similarly inspirational cofounders of the Cochrane Collaboration, arrived at a simple, one might even say ‘simplistic’, definition of what was to constitute ‘evidence’. As mentioned above the simplicity of this message hastened uptake of the systematic review model. At the same time it also served, albeit unintentionally, to store up a legacy of opposition from proponents of other study types, research paradigms and, indeed, definitions of evidence.

Similarly the model of the EBP process, now simply abbreviated as the 5A model,6 is, as stated elsewhere, an intentionally simplistic one.7 Essentially it can be viewed as a model of information management,8,9 embodying the stages of query identification, information retrieval, information quality appraisal, sense-making and application. However the fact that the foremost advocates of this process have been clinicians, not information specialists, has helped to enhance its profile and to speed up its uptake. McMaster University could mobilise a dynamic mixture of diverse talents in the form of such persuasive individuals as David Sackett, Scott Richardson, Gord Guyatt and Andy Oxman, together with health libraries’ own Ann McKibbon. Given the impact of opinion leaders as an acknowledged strategy for enhancing the uptake of change and EBP10 how could such a movement fail? If this seems overly charitable in acknowledging the contribution of the science, or should I say art, of marketing, then consider how the movement might have languished had it remained as ‘clinical epidemiology’!11
Using EBP in practice?

So what are the implications of the above for information professionals involved in using evidence in practice? It seems to me that such implications are at least two-fold; that is both direct and indirect.

Directly, we must always be aware that EBP embodies just one model or worldview, albeit one that continues to be high-profile and in the ascendency. One of the most irritating, and ultimately alienating, traits of its advocates can be an inordinate confidence that EBP is the best way, indeed the only way. Not unsurprisingly this often provokes challenges from opponents to demonstrate the evidence for evidence-based practice itself. Such discussions, resembling the ‘my dad is bigger than your dad’ disputes of the infant playground, are ultimately fruitless. However it would be intellectually interesting, at least, to identify a health-based international movement, proposed at the same time as the Cochrane Collaboration or the EBP movement (i.e. the early 1990s), and to use it as a comparator for the pace of adoption and, presumably less effective, use of marketing.

Furthermore, EBP is grounded in a scientific and objective world view. It struggles to recognise that doctors do not cease being quirky idiosyncratic human beings simply by donning the white coat that signifies their station. You only need to stand in a lunch queue of nurses waiting for chips and other unhealthy foods to realise that human behaviour frequently finds itself at odds with ‘pure’ EBP. Such a realisation will cause us to change our own approach when adopting the EBP model. We will choose to present the tools of EBP as part of a toolbox or toolkit from which to select the most appropriate tool for the task in hand. The tools we highlight should not be restricted exclusively to those of EBP – equally they will include those derived from change management, from behavioural models and theories, from management and from quality assurance. Are these other tools as readily to hand for us as a profession as the tools that we have assimilated from EBP over the last decade? Use of the tools of EBP should not be compulsory but, instead, alternative options of varying degrees of attractiveness and appropriateness. Allied to this is the idea that the information specialist’s approach to teaching the information literacy skill-set required for EBP should focus on identifying the participant’s own preferred learning and search styles. It should therefore seek to enhance what is already present rather than seeking to change this to some supposed ideal, some gold standard. If our emphasis is on ‘answers’, rather than ‘articles’, there is little reason to believe that ‘correct’ ways of searching MEDLINE and the Cochrane Library are any more likely to retrieve such answers than sophisticated use of Google Scholar and other similar tools.

More style required?

Indirectly, as those involved in marketing our own resources, services, skills and expertise, we can perhaps learn from the modus operandi of the Cochrane Collaboration or the Evidence Based Working Group at McMaster University. Could it be that we are overly concerned with conveying a complex message about the contribution we can make to information management and EBP? Certainly we do encounter frequent oscillation between the message that searching for literature is a skill to be acquired by any intelligent health professional and the message that it is all so complicated that only specially-evolved creatures called ‘librarians’ should be allowed to do it! Of course this particular tension originates in the fact that, despite several attempts to establish an answer through research,12,13 we still do not know whether our priority should be intermediate literature searching (i.e. doing the searches ourselves) or end-user training (teaching others to do it for themselves). The marketing industry acknowledges that it is important to identify your ‘unique selling points (USPs)’ and it seems that, as a profession, we are a long way from agreeing what these actually should be. Indeed it would even be productive to arrive at agreement, via an evidence-based protocol informed by consensus, on the indicators that best determine which of these competing strategies is most appropriate for particular types of search enquiry. Do we have a simple, even simplistic message, that we can focus on now with a view to adding the subtleties and nuances of the vanilla-, fruit- and diet-versions in the not-too-distant future?
We can also learn as a profession from the more specific tools that have been developed for EBP and how they too have been promoted. Consider the PICO model of question formulation and search inquiry. How any health librarian would love to have conceived such a simple and memorable device! Similarly with the Critical Appraisal Skills Programme (CASP) checklists or the idea of the 5A process itself. Certainly EBP has acted as both catalyst and focal point for creative and imaginative tools, acronyms and frameworks. While librarians have contributed ‘assists’ to many such initiatives there are few, if any, that can be directly attributed to the creative endeavours of librarians themselves.

Summing up

Focusing in this way on marketing aspects of such an impressive endeavour as the Cochrane Collaboration runs the risk of provoking censure or criticism. However, in the wider scheme of human activity, marketing is simply a label that has been attached to a praiseworthy desire, and consequent activity, to tell others of the existence of something that potentially may benefit or prove of service to them. We cannot be blamed for the fact that marketing is viewed with more than a little snobbery within the academic community or that frequent examples of the misuse or abuse of marketing have led to its acquiring itself a bad name. A delicious irony there, of course!

In fact the principles of marketing have been successfully fused with EBP within the emerging discipline of knowledge transfer, or knowledge interaction, which I confidently predict will become the biggest stimulus to health librarianship since EBP itself. Clearly we can learn a significant amount from analysing the growth and uptake of the activities of the Cochrane Collaboration or, indeed, of the evidence-based practice movement more generally. Lest we be misunderstood, however, it is not simply a case of devising some elegant equivalent of a PICO structure or a CASP checklist, telling everyone about it and then waiting for it to be taken up widely by the health community. Successful development of a next generation of information management tools will require a detailed knowledge of the subject area, of the needs and preferences of each target group, of available alternatives or ‘competitors’ and of the context in which any tool is to be used. In short, more market research is needed. If I have failed to get across this particular point then clearly there is even more that I still have to learn about both medium and message!

References


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