EDUCATING ABOUT COMPLEMENTARY AND ALTERNATIVE MEDICINE

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Abstract
Considering the prevalence of complementary and alternative medicine in the community and the growing evidence base, health practitioners (and patients) need to develop informed and balanced attitudes, skills and knowledge that are going to assist in making safe and beneficial decisions regarding the use of complementary and alternative medicine. Education regarding complementary and alternative medicine use generally, and for cancer in particular, has tended to be tokenistic and piecemeal at best or, at worst, totally absent or misinformed. Complementary and alternative medicine content is often marginalised rather than being seen as an integral part of the core knowledge and skills that a well-rounded and informed health practitioner requires. This is problematic for a number of reasons, including that the practitioner is less aware of which therapies are potentially useful or harmful and is therefore less able to help patients make informed and safe decisions regarding this aspect of their healthcare. It also potentially impedes the therapeutic relationship and communication between therapist and patient, especially if a patient has a disposition towards complementary and alternative medicine. This paper will review some of the background issues regarding education about complementary and alternative medicine and make suggestions about what should be minimal knowledge and competency for a health practitioner. At a minimum this content should include teaching on the common complementary and alternative medicine modalities, ethics, the economics of complementary and alternative medicine, evidence, safety and risks including interactions, clinical applications, clinical skills in history taking and communication around complementary and alternative medicine, and how to find and assess further information. Rather than being taught as a separate discipline, complementary and alternative medicine is best integrated into the wider curriculum and healthcare delivery based upon integrative medicine principles.

Why does a health practitioner or patient need to know about complementary and alternative medicine (CAM)? There are a number of possible answers to that question, some of which will be examined in this paper, and many other answers will be explored in greater depth by other contributors to this Forum. One answer is that CAM holds a mirror up to conventional healthcare education and practice. Many practitioners feel the need, and have the interest, to know more about CAM but feel that their undergraduate education does not prepare them in this area adequately. It also helps a practitioner to develop critical reflection about what takes place in conventional healthcare and issues such as:

- what constitutes modern medicine?
- clinical research, critical appraisal and evidence-based medicine
- community attitudes to health and illness
- health economics and resource allocation
- communication and the doctor-patient relationship
- inter-professional education, practice and ethics

Considering why people are using CAM may be useful in telling us something about the real or perceived deficiencies with conventional healthcare practised on the illness and practitioner-centred model as it currently is. Increasing numbers of cancer patients are turning to CAM for a range of reasons, such as:

- dissatisfaction with the medical profession, particularly its perceived lack of humanity
- the extended time and holistic nature of the consultations with CAM practitioners
- orthodox medicine has difficulty in successfully managing many chronic diseases and diseases associated with ageing
- the desire for an increased access to information, patient empowerment and a reduced tolerance of medical paternalism
- concerns about the expense, invasiveness or overuse of pharmaceuticals in conventional healthcare
- the rise of the consumer movement and postmodernism
- people finding that CAM is effective for improving wellbeing, managing symptoms or altering the course of disease progression.

CAM use is common among patients with specific illnesses like cancer, HIV and MS, with approximately two thirds of such patients using it. CAM patients tend to be younger, female, better educated and from...
higher socioeconomic groups. More people wish to look for a wider range of management strategies, consult varying information sources and make up their own minds about which treatments to use.

CAM is a fact of life in modern healthcare. For example, among Australian general practitioners, approximately 90% have referred patients to CAM practitioners and over one in four practise the common modalities like prescribing vitamins and supplements, administer acupuncture or teach meditation and relaxation therapies.\(^1\) As such, CAM is a reality which the medical profession cannot afford to ignore. If it attempts to do so, it is more likely to marginalise itself rather than CAM in the eyes of many patients.

**Definitions, science and healthy scepticism**

The definition of orthodox or conventional medical practice has rather blurry edges that are constantly moving. Each practitioner and patient will have a different view on this. These edges also vary widely, not only from one country to another, but from one hospital or medical practice to another, and even between clinicians working within the same hospital or clinic. A widely used definition is that orthodox medicine is scientific and evidence-based.\(^1\) Unorthodox medicine – which includes both complementary and alternative medicine – is therefore unscientific and not evidence-based. Although this definition might be accurate much of the time, it does not take long to see that many things done in orthodox medicine are not based upon sound evidence, but upon convention or evidence that is substantially biased by industry funded research. The consistent and widespread publication bias in favour of medications, for example, unobtrusively influences clinicians’ treatment decisions. Consider the heavy promotion, high expense, toxicity and hasty uptake of many new cancer drugs.\(^1\)

Then, of course, there is a range of unorthodox therapies which have gathering evidence supporting their use and which have better safety profiles than commonly used conventional treatments. Examples could include St John’s wort for depression,\(^1\) Co-enzyme Q10 for hypertension,\(^1\) acupuncture for pain relief,\(^1\) and Saw Palmetto for benign prostatic hypertrophy,\(^1\) to name a few. A case could be made that these therapies should be considered as first-line treatments. For example, omega-3 fatty acids are more effective for managing hyperlipidaemia than any pharmaceutical and they have beneficial side-effects and lower cost.\(^1\) Unfortunately, most of these therapies are unlikely to be taught within medical curricula or discussed by clinicians in bedside teaching as valid treatment options.

Thus, using evidence as the defining line between orthodox and unorthodox treatments is not necessarily true. Examples have been given to make a point, but the point from an educator’s perspective is not to have students believing that all CAM is helpful or safe, but rather to help students to maintain a healthy scepticism and an open-mindedness that is not blind. If it is challenging for trained health professionals to sort out the wheat from the chaff in relation to CAM, then how much more difficult will it be for patients and their families to make safe, informed and effective decisions regarding their healthcare? ‘Science’ is done by scientists, and the fact that scientists are human, means that science is as much about people and human psychology as it is about objective scientific facts.

Part of the problem may be that, consciously or unconsciously, we often draw arbitrary, unhelpful and rigid boundary lines within our thinking, with the result being that things which fall within the boundary are accepted unquestioningly, and things that fall outside the boundary are rejected out of hand. It fosters a kind of war-like mentality which closes down healthy dialogue and healthcare professionals from various persuasions become combatants rather than colleagues. Objectivity and truth are most imperilled in such circumstances. Caught in this war are patients, and their families are then pressured to take sides. They may receive so much conflicting advice that they may cease to communicate with their practitioners fully about the management decisions they are making.

The implications for medical education are that teachers need to be informed, need to refer to up-to-date evidence with an open mind, and would do well not to draw artificial and unhelpful boundaries rather than just be interested in what works, what is safest, what is most economical, and what fits with the patient’s preferences.

**Integrative medicine**

Perhaps a more useful term than CAM is integrative medicine (IM). IM refers to a holistic philosophy and way of practising healthcare which includes orthodox practice, but also places a greater emphasis on wellness, the integration of lifestyle factors and the use of CAM where it is safe, ethical and supported by evidence. In many ways, IM is not alternative practice but best practice. Naturally, the approach to any given health issue will be guided by evidence, practitioner experience and, importantly, patient preferences. In the IM model, CAM does not sit outside or compete with orthodox healthcare, but rather various modalities are interconnected and complementary. IM is an approach being investigated as the way of the future for healthcare. For example, in the United States it has recently been the subject of a US Senate hearing on healthcare, it is being fostered by the Royal Australian College of General Practitioners,\(^1\) and it is the model that has been introduced into the curriculum at Monash University.\(^1\)

There arises a legitimate criticism that modern healthcare in its practice and funding has for too
long under-recognised the importance of the holistic perspective, lifestyle issues and the prevention of illness. It would seem that the greatest aspiration to which modern medicine aspires is merely to help a person over the line from having demonstrable symptoms to no longer having demonstrable symptoms - which does not mean that the illness is not still there nor that the person is well. Many may argue that orthodox medicine largely ignores the importance of higher order wellness. It is in the search for a holistic or wellness approach, or in order to receive lifestyle advice and counselling, that many people seek out CAM practitioners. This is not an argument for a different healthcare system, but rather an argument for a significant renovation of the healthcare we are currently delivering.

Aim of educating health practitioners

The aim of practitioner education largely follows from defining the aim of clinical practice. If the aim is to produce a well rounded, generic practitioner who understands both the prevention and treatment of illness, and if the future of modern healthcare is to be able to span both illness and wellness, then some significant changes need to be made to the way that most courses approach CAM teaching. Consider the following issues.

Approximately two thirds of the population in most developed countries use one form or other of CAM, whether it be administered by a practitioner or, as is commonly the case, is self-administered.

Some CAM provides useful therapies either aimed at cure, slowing the progression of the illness, ameliorating symptoms, or possibly producing higher level wellbeing. As such, a practitioner needs the knowledge and skills to recommend the CAM that is safe and effective.

CAMs could potentially interact, for better or for worse, with orthodox therapies. As such, a practitioner needs to routinely ask patients about them and know where to find information on which ones interact with which medicines.

Patients may be making decisions about which treatments to use, or whether to use them at all. Apart from having implications for educating patients, it is also difficult to individualise treatments to a given patient without knowing about their views and preferences.

When clinicians are asked about CAMs they are not likely to know the answer if they have had no education in this area. A blanket response of warning against the use of CAM, or a diserisy remark that all CAM is ineffective, is likely to be unconvincing and uninformed.

The significant and legitimate concerns about the motives and influence of the pharmaceutical industry on the community and the medical profession cannot be ignored, as it may be driving more people to use CAM in what they perceive to be a more wholesome and unbiased form of healthcare delivery.

Considering that the majority of patients do not wish to turn against conventional healthcare when they adopt CAM, the majority would feel comforted to speak with their medical practitioners about these matters if such conversations could be opened up in a respectful way.

Most training of health practitioners tends to either ignore issues related to CAM altogether or marginalise it. Data from the US, Europe and Japan indicates that medical schools vary widely in their approach and content as far as teaching CAM is concerned. Many do not teach content on CAM at all, whereas others have compulsory familiarisation subjects. In Canada, a useful initiative has attempted to provide standards and consistency in CAM teaching. The National Centre for Complementary and Alternative Medicine had set up a previous initiative in the US aimed at enhancing education in this area. In Australia, most medical schools teach less than five hours of content on CAM and mostly related to generic issues rather than clinical applications.

When practitioners go out to search for CAM courses themselves, they may find a mixed bag in terms of quality. Much of the educational content on CAM in ‘evidence-based’ CAM courses is of questionable quality and may not be based upon an objective assessment of the evidence. It behooves an educator to refer to the best evidence available, teach in an objective and unbiased manner and to help students to navigate their way through the maze of information and misinformation available.

Although one could make a case for all students needing to know about the applications of those CAMs which have good evidence supporting their use, detailed knowledge of any particular modality will probably always remain outside the brief of most curricula. For example, it is not expected that medical students will graduate being skilled acupuncturists or herbalists, although they might be expected to know some common and clinically important examples, the indications for the use of these treatments and any major contraindications or interactions. Electives and post-graduate training for interested students and doctors may be the best means to learn about any particular modality in more detail.

On the one hand we need to be open to many of the things that significantly affect health but are much undervalued in medical education, practice and resource allocation. On the other we need to discourage the use and promotion of those healthcare practices and therapies which do not work, particularly when they have significant side-effects and are expensive. Therapies in this latter category have significant potential to prey upon the concerns of uninformed and vulnerable patients.
responsibility is not one which a medical student’s education can afford to ignore.

As the bare minimum for a health practitioner, curriculum to cover in relation to CAM teaching include generic issues such as understanding CAM modalities and classification, as well as the reasons why people use CAM. The ethics, medico-legal issues and economic issues regarding CAM use should be covered. Very important is the consideration of evidence and which therapies are likely to be effective and safe and which are not. The other main area is how discussing and implementing CAM affects the doctor-patient relationship and communication, as well as how the practitioner can assist a patient to make an informed decision and find reliable information.

It would be fair to say that if there is good evidence supporting the benefits and safety of any particular therapy, whether it be complementary or conventional, then that therapy should be known about and recommended. At very least it should be discussed as one of the possible treatment options and the benefits and risk of its use discussed as it would be with any other treatment. Even if practitioners do not feel adequately trained to administer a CAM treatment themselves or to field questions about it, they should still know that it exists and where the patient could go in order to find out that information. The practitioner may play an important role in helping a patient to interpret information that they have found for themselves.

References