



# Integrating complementary medicine literacy education into Australian medical curricula: Student-identified techniques and strategies for implementation



Kate Templeman<sup>a,\*</sup>, Anske Robinson<sup>a</sup>, Lisa McKenna<sup>b</sup>

<sup>a</sup> Monash University, Faculty of Medicine, Nursing & Health Sciences, School of Rural Health, Australia

<sup>b</sup> Monash University, Faculty of Medicine, Nursing & Health Sciences, School of Nursing & Midwifery, Australia

## ARTICLE INFO

### Article history:

Received 6 July 2015

Received in revised form

9 August 2015

Accepted 6 September 2015

### Keywords:

Complementary medicine

Alternative medicine

Curriculum

Medical education

Integration

## ABSTRACT

Formal medical education about complementary medicine (CM) that comprises medicinal products/treatments is required due to possible CM interactions with conventional medicines; however, few guidelines exist on design and implementation of such education. This paper reports findings of a constructivist grounded theory method study that identified key strategies for integrating CM literacy education into medical curricula. Analysis of data from interviews with 30 medical students showed that students supported a longitudinal integrative and pluralistic approach to medicine. Awareness of common patient use, evidence, and information relevant to future clinical practice were identified as focus points needed for CM literacy education. Students advocated for interactive case-based, experiential and dialogical didactic techniques that are multiprofessional and student-centred. Suggested strategies provide key elements of CM literacy within research, field-based practice, and didactic teaching over the entirety of the curriculum. CM educational strategies should address CM knowledge deficits and ultimately respond to patients' needs.

© 2015 Elsevier Ltd. All rights reserved.

## 1. Introduction

Increasing popularity and use of complementary medicine (CM) worldwide [1,2], has spurred widespread discussion for curricula reform [3]. Need for educational reform has been well supported over the past decade, with authors agreeing that medical practitioners need to be better educated about CMs [4]. CM options in medical schools have included elective classes, incorporation of CM material into required courses, CM rotations for residents, clerkships, and integration of CM content into clinical case conferences [5–8]. Although this progress is encouraging, some authors suggest that CM education in medical schools remains inadequate [9–11].

Since the wider area of complementary and alternative medicine is diverse [12], MacLennan et al. have been more specific and deployed the terms CMs (i.e. medicinal products) and complementary therapies (i.e. acupuncture, massage therapy, chiropractic) [13]. The term CM represents ingestible items as opposed to

physical therapies. Ingestible non-pharmaceutical medicines commonly available without prescription can at times result in adverse events from interactions with pharmaceutical medicines, and evidence of their effectiveness is limited. As consumers commonly self-medicate with CMs [14–16], which have potential for interactions with pharmaceutical medicines, this paper focuses on CMs to address safe and appropriate use of these medicines. In this paper, CMs are defined as: *herbal medicines, vitamin, mineral and other nutritional supplements, traditional Chinese medicines, homoeopathic medicines, and other ingestible non-pharmaceutical medicines* [17–19].

In Australia, CM inclusion in medical education (ME) is not well developed despite escalating patient use of CMs and need for medical practitioner CM literacy [20]. There has been encouraging growth of CM content in Australian medical schools as part of core curricula [20–22]; still, content is sporadic and widely variable depending on independent institutions [23] resulting in inconsistent knowledge among medical students. To address knowledge gaps in Australian ME, advances in CM education have occurred within prevocational training for junior doctors [24] and general practitioners (GPs) [25]. Despite these developments, little has occurred to formally include CM education at medical school level.

\* Corresponding author. Monash University, Faculty of Medicine, Nursing & Health Sciences, School of Rural Health, PO Box 973, Moe, Victoria, 3825, Australia.  
E-mail address: [kate.templeman@bigpond.com](mailto:kate.templeman@bigpond.com) (K. Templeman).

Education about CMs is indicated in the undergraduate years to equip medical students with basic knowledge and skills to meet CM needs encountered in the prevocational setting [20,24]. To ensure high-quality CM provision, it is important that medical educators consider introducing CM content into the curriculum. While core standards have been suggested regarding what should be taught and how [11,21,26–28], and by whom [29], the field of CM is extensive with few standardised guidelines, much less in the Australian context. Furthermore, there is paucity of literature describing student learning experiences and knowledge of CM curricula [30–32].

This paper draws upon findings from a qualitative study exploring CM literacy education development within ME in Australia. As part of this study, strategies to construct a working platform to integrate CM literacy education into Australian medical schools were explored. To date, little information exists about what is needed to improve CM education and capacity. Furthermore, there is no current consensus on content and form of CM education at medical schools. This paper highlights educational strategies for integration of CMs into Australian ME programs identified by medical students. The results provide a feasible way forward with practical considerations for achieving CM literacy. Curriculum activities presented in this paper can be adapted or customised to meet the needs of educators, stakeholders and students at a given school across the educational spectrum.

## 2. Methods

Constructivist grounded theory method (CGTM) was used for this study [33,34]. Theory construction and development through CGTMs of constant comparison of data, reflexive memoing, theoretical sensitivity, and theoretical sampling were employed [33–35]. The study drew upon the theoretical framework of symbolic interactionism and social constructivism to explore Australian medical students' experiences and knowledge of the curriculum [34,36,37]. Focus of the interviews for this study was to explore inclusion of CM in medical curricula, including the extent of, and need for, inclusion, challenges when including CM education, and feasible strategies for enabling incorporation of CMs into the curriculum. This paper specifically focuses on exploring knowledge and experiences of Australian medical students in relation to identifying key strategies for incorporation of CM education into ME.

Following rigorous tenets of theoretical sampling and theoretical saturation of data [33,34], 30 medical students (Table 1) from 10 university medical school contexts across five Australian states and one territory were interviewed in 2013 [38]. Theoretical saturation of the data [34] occurred on completion of 30 interviews; that is, when further data generation elicited no new theoretical insights around key patterns in the data, and relationships among categories was well established [34].

Analysis of the findings is presented using storyline, a grounded theory technique that reflects conceptual interpretation of the data and conveys explanatory power to the reader about relationships between concepts that make up the theory [33,39]. In this paper, the storyline is a conceptual narrative presentation [33,40] of the category *baseline CM literacy educational needs* that was constructed from the data. Identified subcategories are used as headings to provide structure, with the presence of theoretical concepts imbedded throughout the storyline [34]. Further details of the methods in their entirety, based on the overall study, are described in previous papers [20,41]. This study was approved by Monash University Human Research Ethics Committee (MUHREC).

## 3. Results

The findings presented focus on the category *baseline CM literacy educational needs* constructed from the data. This category highlights strategies incorporating key aspects of CM education that students considered necessary to learn or gain as core skills for basic CM literacy. Four subcategories culminated from student interviews about their ME learning experiences conceptualised as: (1) how to introduce CM education, (2) CM education content, (3) CM education scenarios, and (4) assessment and evaluation.

### 3.1. How to introduce CM education

In developing a CM educational program, most students agreed that CM material should be mandatory within medical school and comprise part of the core curriculum. Students did not support development of one specific CM intervention; rather, they identified that greatest benefit and impact would result from an integrative educational strategy that is both faculty- and student-friendly. This involved CM development within existing structures such as pharmacology, pathology, and physiology, as well as lectures, tutorials, and problem-based learning (PBL) and/or case-based learning (CBL) pedagogy surrounding these aspects. It was recommended that these components progress in a logical manner over the duration of the medical program so students can expand their knowledge and skills in tandem with the normal sequencing of ME. Students suggested these components be nestled within a curriculum format of integrative teaching whereby CM content is visibly interwoven as additional complementary components within the broader context of a primary topic or discipline. For example, when students learn about the management of depression (St John's wort), orthopaedics (glucosamine), or cardiovascular disease (fish oil), teaching methods integrate important principles of CMs.

Most students agreed that CM material should be included from first year (day one or very early on) to final year. This was considered important to rationalise student attitudes to CM as a normal process throughout the entirety of the medical program. Students suggested that integration occur both vertically and horizontally, for example, a standalone lecture-type introduction to CMs followed by integration of CM material throughout the whole curriculum, respectively. However, horizontal integration was preferred to ensure that CM content is visible and not hidden within an existing vertical theme. The aim of this approach reflected the belief that specific CM literacy skill sets students acquire should be present in the normal processes of ME.

In providing broad familiarisation, students suggested that CM content and execution be compatible with conventional medicine's basic epistemological framework and evidence-based medicine (EBM) principles. Therefore, rationalisation of CM is more normalised and less obtrusive. Having CM as a fully recognised component of ME rather than standing alone was thought to prevent alienation of CMs. Another important concept involved ensuring that CM education comprises a relatively small yet informative part of the curriculum to instil basic literacy. Students also reiterated that phasing CM education in slowly over time with limited goals may make the process more feasible and ease the transition.

### 3.2. CM education content

A topic-based approach to CM education was considered the most applicable to medical schools. A core curriculum of concise priority CM topics was identified (Fig. 1).

These topics covered key dimensions that students considered

Download English Version:

<https://daneshyari.com/en/article/2628282>

Download Persian Version:

<https://daneshyari.com/article/2628282>

[Daneshyari.com](https://daneshyari.com)