Complementary Therapies in Clinical Practice 28 (2017) 204–211

Contents lists available at ScienceDirect

Complementary Therapies in Clinical Practice

journal homepage: www.elsevier.com/locate/ctcp

Indonesian provisional clinical psychologists' knowledge, attitudes, and behaviours towards complementary-alternative medicine (CAM)

Andrian Liem*, Peter A. Newcombe

School of Psychology, University of Queensland, Australia

ARTICLE INFO

Article history:
Received 21 April 2017
Received in revised form
7 June 2017
Accepted 29 June 2017

Keywords:
Knowledge
Attitude
Complementary-alternative medicine
Integrative medicine
Clinical-health psychology
Indonesia

ABSTRACT

Sixty provisional clinical psychologists in Indonesia were emailed to seek their participation in an online-questionnaire that reflected: CAM knowledge, attitudes CAM, and CAM behaviours. Of the 60 participants approached, 44 with majority of female (95%) completed the questionnaire. The mean age of participants was 25 years. Overall, participants reported low knowledge of CAM and attitudes towards CAM were positive. While 73% reported having recommended CAM to their clients, only 39% had ever made referral. Most of the participants (98%) had used CAM personally but just over half (59%) had ever used it in clinical practice. It was found that knowledge and attitudes towards CAM did not predict CAM recommendation, personal use, nor professional use among the participants. However, CAM knowledge was found to predict CAM referrals. It is assumed that positive attitudes towards CAM integration among participants has been conflicted with their concern for CAM safety.

1. Introduction

Complementary-alternative medicine (CAM) in Indonesia is defined as "Non-conventional treatment aimed to improve public health status including promotive, preventive, curative, and rehabilitative ways that are obtained through a structured education with quality, safety, and high effectiveness that is based on biomedical science and which has not been accepted in conventional medicine" (translated from the Indonesian Health Ministry version) [1]. This definition is similar to a definition from the National Center for Complementary and Integrative Health (NCCIH) in the USA ("A group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine") that is most commonly cited in CAM studies [2,3]. CAM has been integrated into conventional medicine health services by Indonesian Government since the early 2000's. The Indonesian Health Ministry also released a standard medical service of acupuncture, herbal medicine, and hyperbaric to protect patients from malpractice [4–6].

Mental illness is one of the most expensive disorders to treat, especially the costs for drug treatment [7–9]. CAM has been shown to be effective not only for physical but also for psychological issues such as smoking addiction [10]; anxiety and depression among both chronic patients and general population [11–13]; autism [14,15]; and post-traumatic stress disorder (PTSD) [16,17]. Following previous studies [18,19], CAM in this study is limited to 13 methods (acupressure, acupuncture, aromatherapy, biofeedback, dietary-supplements, energy therapy, herbal therapy, hypnotherapy, massage therapy, meditation, music therapy, religious-spiritual therapy, and yoga) for which there is scientific evidence to support their use with psychological problems.

WHO estimated that in developing nations, the proportion of psychologists in low-lower middle income nations is 2–14 per 1,000,000 while in upper middle-high income nations it rises to 147–379 among 1,000,000 [20,21]. In addition, clinical psychologists (CP) have only been recognized as health professionals by the Indonesian government since 2008 [22]. With few CP, there is a need to encourage an integration of medical approaches between conventional medicines and treatments and CAM [14,19,23]. However, if CP lack knowledge about CAM then they are less likely to understand and evaluate the benefits and risks of CAM usage or integration and also will be less able to communicate clients' CAM usage to other health care workers [24]. Negative attitudes toward CAM are also more likely to discourage CP from collaborating with CAM practitioners or using CAM methods that are available in health centres to improve their client's outlook [25,26].

Previous research about the knowledge of, attitudes, and

* Corresponding author. Room 303 McElwain Building, School of Psychology, University of Queensland, 4072, Australia.
E-mail address: andrian.liem@uq.net.au (A. Liem).

http://dx.doi.org/10.1016/j.ctcp.2017.06.007
1744-3881/

behaviours towards CAM has been conducted in developed nations [27] with the majority of participants being doctors [28,29], nurses [2,30,31] and students of health profession programs [32–35]. Although there is an abundance of literature on the effectiveness of CAM (e.g. Hasan, Zagarins [10]; Uttley, Scope [36]; and Zheng, Lan [37]) few studies based in Indonesia have examined CAM, and none involve CP. Therefore, to fill the understanding gap, this pilot study aimed to assess knowledge, attitudes, and behaviours towards CAM among provisional CP in Indonesia. Provisional psychologists were chosen because they have similar knowledge foundation with, and will likely be full-practice, registered CP in the future. Moreover, the professional skills of provisional psychologists such as diagnosing, planning treatment, and conducting intervention are at similar levels with registered CP [38,39].

2. Material and method

2.1. Data collection and participants

Sixty provisional CP completing their master program in clinical psychology at one of two public universities in Jakarta and Yogyakarta provinces, Indonesia, were invited to participate in this research. These universities were selected as they have the most established psychology programmes in Indonesia. Participants were required to have at least three months professional internship experience and to have commenced their master's program between 2012 and 2015. The response rate was 73% (44 of 60 eligible participants). The mean age of participants was 25 years ($SD = 2.12$) and predominantly females (n = 42, 95%). Participants represented 16 of 34 provinces in Indonesia. Ethical approval for the study was granted by the School of Psychology at the University of Queensland (#16-PSYCH-PHD-08-JH).

2.2. Measures

2.2.1. Knowledge of CAM

This included six-items modified from previous study [25] reflecting three areas: 1) CAM basic information (e.g., “My knowledge about the philosophy of acupressure”); 2) CAM integration in CP practices (e.g., “My knowledge about regulation from professional organization about energy therapy”); and 3) the risks of CAM use (e.g., “My knowledge about the side effect of yoga”). Participants responded to these items for each of the 13 CAM methods on a 7-point Likert-type scale (1 = ’no knowledge at all’ to 7 = ’know very well’). Scores for each item were calculated by averaging across the 13 CAM methods. Finally, scores for knowledge of CAM were calculated by averaging across the six items. Cronbach's coefficient alpha for the full scale was 0.90.

2.2.2. Attitudes towards CAM

Ten-items were adopted from preceding studies [40,41]. The three sub-scales included: 1) attitudes towards knowledge of CAM (three items, e.g., “Psychologist should be able to advise their clients about commonly used CAM methods”); 2) attitudes towards integration of CAM (three items, e.g., “Clinical care should integrate the best of conventional and CAM practices”); and 3) attitudes concerning the risks associated with CAM (four items, e.g., “CAM is a threat to public health.”) and assessed through a 7-point Likert scale (1 = ’strongly disagree’ to 7 = ’strongly agree’). Scores for attitudes towards CAM were calculated by averaging across the ten-items. Internal consistency for the full scale was satisfactory, $\alpha = 0.76$.

2.2.3. Behaviours related to CAM

Behaviour was assessed by asking participants about four behaviours associated with each of the 13 CAM methods: 1) CAM personal purpose; 2) CAM recommendation; 3) CAM referral; and 4) using CAM in clinical practice. The sample items for this scale are “Have you ever used herbal medicine for your personal purpose?” and “Have you ever recommended aromatherapy to the clients?” Participants scored a “1” if they responded “yes” and “0” for “no”. Scores for each behaviour were calculated by summing responses to the 13 CAM methods. However, for the descriptive statistic for each behaviour (percentage), participants scored a “1” if they responded “yes” to at least one of the 13 CAM methods. Otherwise, they scored “0” for indicating no behaviour. The Kuder-Richardson Formula 20 value of this scale was 0.62. Details of instrument psychometric properties is reported elsewhere [74].

2.3. Procedure

After permission was obtained from the gatekeepers (the deans at two universities), an email that included a cover letter, information and consent form, and a link to the online-survey (Qualtrics online survey software, Provo, USA) was sent to participants. On average, participants took 22 min to complete the online-questionnaire.

An online-survey has been used in previous CAM studies among health professionals and students [3,42,43] because of its efficiency in time and cost; the auto input of responses to analytical package thus minimizing error in data entry and tabulation, and ability to create an attractive and user-friendly page [44,45]. However, an online-survey also has potential disadvantages related to internet connection and data safety. Participants require a stable internet access and complete the survey and researcher is required to protect data storage from computer virus or misuse of data. Internet connection in Indonesia is quite stable and fast so it is presumed that participants will be able to access and complete the survey.

2.4. Data analysis

Descriptive statistics were used to organize and describe the variables with frequencies and percentages for categorical data; mean and standard deviation for continuous data. To control for Type II errors, inferential analyses (ANOVA, regression) used the total scale scores rather than individual sub-scale scores. Pearson-correlation test was used to assess the relationships between participants' age, knowledge, attitudes, and behaviours related to CAM. A one-sample *t*-test was used to examine whether scale scores were significantly different from the neutral mid-point. A one-way repeated-measures ANOVA was used to examine the differences between subscales. Four multiple regressions with knowledge and attitudes as predictors were used to examine models predicting the four behaviours related to CAM. Data were analysed using SPSS (v22) with a significance level of $p < 0.05$ being adopted.

3. Results

No significant demographics differences were found between participants from the two universities. The Kolmogorov-Smirnov and Levene's test showed that data was normally distributed and homogeneous. Therefore data from both universities were combined in analysis and parametric tests were used. Given that the sex of participants was predominantly female, analyses were not conducted to investigate differences in knowledge, attitudes, and behaviours towards CAM based on sex.

3.1. Knowledge of CAM

In general, participants reported a low knowledge of CAM