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[O P E 1]

A REVIEW OF TRADITIONAL AND COMPLEMENTARY MEDICINE (T&CM) CLINICAL RESEARCH OF OBSERVATIONAL STUDIES IN MALAYSIA: A BIBLIOMETRIC ANALYSIS

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The steady rise in the popularity of traditional and complementary medicine (T&CM) in Malaysia has sparked a great interest in diving deeper into its past and present which will potentially affect its future whereabouts. The main objective of this study is to identify the quality and quantity of existing T&CM observational clinical research in Malaysia.

A comprehensive search was done on PubMed, Embase and Web of Science to gather relevant publications published only in the English language. These publications comprised of case reports, case series, case-control studies, cohort studies and cross-sectional studies, limited only to the Malaysian population setting. Our analyses included the quantity of existing published T&CM observational clinical research in Malaysia, ranking the top 10 productive institutions from Malaysia on T&CM-related publications. Quality was measured by employing the use of h-index on various institutions.

A sum of 274 research publications were included after fulfilling the stringent inclusion criteria. Results identified the Medical Journal of Malaysia (Q3 of Medicine-miscellaneous), BMC Complementary Medicine and Therapies (Q3 of Complementary and Alternative Medicine (CAM)), and Complementary Therapies in Clinical Practice (Q2 of CAM) as the top three journals actively publishing T&CM observational clinical publications in Malaysia. Meanwhile, the University of Science Malaysia, University of Malaya and Ministry of Health were the top three institutions publishing such publications with h-index of 20, 22 and 11, respectively. Results showed that cross-sectional study holds the greatest number of publications, followed by case reports and case series. Cohort studies and case-control studies hold the least number of publications.

The advocate for a greater future need to reinforce on the inadequacy of proper documentation of T&CM-related publications. This study provided some guidance to practitioners interested in T&CM observational research regarding institutions that are active in this field and where they may consider submitting their T&CM-related research.

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[OPE2]

EFFECT OF INHALED YLANG-YLANG ESSENTIAL OIL ON PHYSIOLOGICAL PARAMETERS AND SHORT-TERM MEMORY OF MEDICAL STUDENTS IN MANIPAL UNIVERSITY COLLEGE MALAYSIA (MUCM), MUAR CAMPUS: A RANDOMISED CONTROL TRIAL

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Usage of essential oil has been rising in the community including the medical students' population. Thus, we need to know the benefits and side effects of essential oils currently available in the market. This study was a randomized controlled trial to determine the effect of ylang-ylang essential oil on short-term memory, respiratory rate, heart rate and blood pressure of medical students in MUCM. Sample was calculated with the help of Epi info sample size calculator. A total of 70 medical students were recruited for this study. The participants were randomly assigned into intervention (35) and control group (35). The respiratory rate, heart rate, blood pressure of participants were measured before they entered the intervention or control room and were recorded in a form. The intervention group participants were exposed to the Ylang-ylang essential oil whilst the control group participants were exposed to water vapor without any ylang-ylang scent. After 10 minutes of exposure in both intervention and control groups respectively, the outcome parameters were measured again and recorded in the same form as before. The study data was analysed using Epi Info software version 7.2.5. The mean memory score of essential oil group was slightly higher than the mean memory score of control group. However, P value was more than 0.05 when t-test was applied thus we cannot prove the benefits of Ylang-Ylang oil. The changes in physiological parameters were not significantly different in intervention and control group. Thus, this study cannot identify the benefits nor side effects of the essential oil. Further study with larger sample size, higher dosage of essential oil and longer duration of exposure is recommended.

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[OPE3]

UNDERGRADUATE MEDICAL STUDENTS' SELF-PERCEIVED KNOWLEDGE AND ATTITUDE TOWARDS HEALTH DISPARITIES

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Good health and well-being for all is the third sustainable development goal established by the United Nations which aims to ensure healthy lives and promote well-being for everyone at all ages. The basic idea is to achieve universal health coverage (UHC), as well as access to quality health care. However, health disparities are a rampant yet often neglected issue in many nations across the world. Race, gender, disability and socioeconomic status are the factors which contribute to individuals' ability to achieve good health. We aimed to determine medical students' self-perceived knowledge and attitude towards health disparities, as well as the associations between gender, ethnicity and family income and health disparities. A cross-sectional study was conducted among medical students of Manipal University College Malaysia. Google form questionnaires were distributed and responses were collected. The data was statistically analysed using Epi Info version 7.2, specifically Chi-Squared test and Fisher's Exact test were used to analyse the data. Findings revealed that medical students agreed that doctors like all individuals have prejudices. Medical students agreed and strongly agreed that they would be able to demonstrate empathy towards multiple difficulties faced by patients from underserved populations. The highest percentage of self-perceived area of knowledge was an assessment of health literacy of the patient. The most significant associations obtained were between family income and comfort of addressing health issues in six underserved populations mainly the immigrants and refugee, the LGBTQ community, the homeless, incarcerated individuals, those who are mentally ill or those with substance abuse and veterans. In summary, most students seemed to have adequate knowledge, positive attitudes and a good holistic self-perception towards health disparities. We recommend institutes to provide learning environments for student exposure to underserved populations which will help to strengthen medical students' attitudes and commitment to underserved communities.

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[OPE4]

ACCEPTANCE OF COVID-19 VACCINE BOOSTER DOSES AMONG PATIENTS WITH COMORBIDITIES IN THE PRIMARY CARE CLINIC OF UNIVERSITI MALAYA MEDICAL CENTRE

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Vaccination is crucial to control the COVID-19 pandemic and endemic. Booster doses of COVID-19 vaccine have been introduced to ensure continual immunity against COVID-19. However, limited data were available on acceptance of booster doses, especially the second booster, among people with comorbidities in Malaysia. We intended to study the actual uptake and willingness to receive booster doses among this group of people.

A cross-sectional study was conducted on patients with comorbidities in a primary care clinic in Universiti Malaya Medical Centre (UMMC) from 20th July 2022 to 5th August 2022. A self-reported questionnaire was used, which included questions on demographic and clinical profiles, actual uptake of and willingness to receive COVID-19 vaccine booster doses, and perception of COVID-19 vaccine booster doses.

391 patients participated in this study with median age of 65 years old (interquartile range 16). Approximately 70% (n=272) of our participants had never been infected with COVID-19 before. 99.7% (n=390) had completed the primary two doses of COVID-19 vaccination. 78.3% (n=306) had taken the first booster dose for COVID-19 vaccine but only 11.2% (n=44) had taken the second booster dose. Out of the 347 patients who had not received the second booster dose, only 34% (n=118) were willing to take the second booster dose while another 35.7% (n=124) remained undecided. Positive perceptions on efficacy (adjusted odds ratio, AOR = 9.028, p = 0.001) and safety (AOR = 36.910, p = 0.002) of second booster dose were associated with willingness to receive the second booster dose.

Actual uptake and willingness to receive the second booster dose of COVID-19 vaccine were low in our cohort with sizeable number of undecided patients. Interventions to improve public's perception on the efficacy and safety of booster doses of COVID-19 vaccine may help to improve their acceptance of booster doses.

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[OPE5]

DEVELOPMENT AND VALIDATION OF THE HEALTH BELIEF MODEL QUESTIONNAIRE TO PROMOTE SMOKING CESSATION FOR NASOPHARYNGEAL CANCER PREVENTION: A CROSS-SECTIONAL STUDY

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The risk factors for nasopharyngeal cancer driven on by lifestyle choices are substantial yet preventable. The purpose of the study was to establish a robust questionnaire of health belief model (HBM) with a focus on smoking cessation. A cross-sectional study was conducted in urban and suburban areas in Sarawak, Malaysia.

A literature review was utilised to construct a preliminary set of questionnaire items. This was followed by translation to Malay version using the forward-backward approach. Content and face validity were assessed by a panel of experts and local smokers, respectively. Construct validity of the instrument was explored via exploratory and confirmatory factor analyses (EFA and CFA). In phase 1 of the EFA, 100 smokers participated, whereas 171 smokers participated in phase 2 of the CFA. By employing Cronbach's alpha coefficients, internal consistency and dependability were assessed.

Each item's factor loading stayed within the recommended bounds in the exploration phase. An adjusted seven-factor model allowed for an establishment of a desirable fit: Chi Square: 641.705; df=500; P: 0.001; CFI = 0.953; TLI: 0.948; RMSEA: 0.041. With the exception of one paired construct, acceptable divergent and convergent validity were demonstrated. With Cronbach's alpha ≥ 0.7, phases 1 and 2 both demonstrated a high level of internal consistency.

Six HBM components and a health behavioural intention are represented by the final questionnaire's 34 items. The result confirmed the validity and reliability of the questionnaire in assessing tendency to quit smoking to reduce cancer risk. This is a vital first step in uncovering the smoking cessation strategies that are instrumental in preventing different smoking-related malignancies in distinct susceptible populations and environments.

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[OPE7]

A REVIEW OF TRADITIONAL AND COMPLEMENTARY MEDICINE (T&CM) CLINICAL RESEARCH OF INTERVENTIONAL STUDIES IN MALAYSIA: A BIBLIOMETRIC ANALYSIS

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Traditional and complementary medicine (T&CM) has made its presence known in the healthcare system as seen in the incline of T&CM usage in Malaysia. In Malaysia, evidence-based publications of T&CM will greatly influence the perspective of T&CM. The core component of this research study is to identify the quantity and quality of the existing published T&CM clinical research of interventional studies in Malaysia.

PubMed, Embase and Web of Science were used in this research study. The findings excluded reviews, in-vivo and in-vitro, conference articles, non-Malaysian study population and non-English articles. From the search results, the journals and leading institutions actively publishing such papers were identified based on the publication numbers, h-index, and average citation. The top 10 cited journal articles were identified and an analysis of recognised practice areas and areas of interest and characteristics of different types of T&CM interventional clinical research publications was performed.

A total of 56 interventional studies were winnowed out from the search results. The interventional studies of T&CM in Malaysia consisted of pre-post studies, non-randomised controlled trials, and randomised controlled trials. With all the data discovered, the top three journals were identified to be Evidence-Based Complementary and Alternative Medicine, Complementary Therapies in Medicine, and Cerebrovascular Diseases, while the top three institutions are the University of Science Malaysia, the Ministry of Health, and the University of Malaya. The recognised practice areas to have the most publications, which happens to be Traditional Chinese Medicine first, followed by Traditional Malay Medicine and then Traditional Indian Medicine. Additionally, the eminent area of interest was oncology and gynaecology.

This study acts as a tool for verifying the amount of existing published clinical research of interventional studies of T&CM in Malaysia in terms of quality and quantity.