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Introduction: The Window of knowledge in the Contributions of the Traditional, Complementary and Integrative Medicine in the context of COVID-19 pandemic, of the Virtual Health Library on Traditional, Complementary and Integrative Medicine of the Americas (VHL TCIM Americas), is a joint project of the TCIM Americas Network and the Brazilian academic consortium of integrative health CABSIn, coordinated by BIREME/PAHO/WHO. Objectives: to promote access to information on the contributions of TCIM in the different dimensions of health in the context of COVID-19.

Methods: the informative content of this window was carried out based on the collaborative work of professional TCIM researchers from 15 countries in America. The topics covered were organized in response to the global needs of health emergencies, like the current pandemic. Results: This Window of Knowledge is available at the VHL TCIM Americas, and organizes information about the contributions of the TCIM, such as: strengthening the immune system, mental health, occupational health, self-care of health professionals, and in complementary management of clinical symptoms of respiratory viral infections. Additionally, the window shows the research initiatives in the topic, experiences of TCIM's articulation by health authorities, as well as the initiatives by and for the ethnic groups in the Americas. Other result of the window work was carried out an International Symposium, which involved 22 speakers from 12 countries. The event had more than 21000 views. In continuity, Webinars on the themes are being promoted. And the evolution of the work follows the updating of information and inclusion of emerging themes.

Conclusions: The window translated scientific evidence for health professionals, academic communities, governments, as well as civil society, by the collaborative work from various stakeholders involved in the TCIM field, for contributing in the articulation of the TCIM in the response for the pandemic. http://mtci.bvsalud.org/vitrinas/pt/post_vitrines/contribuicoes-das-medicinas-tradicionais-complementares-e-integrativas-mtci-no-contexto-da-pandemia-da-covid-19/

Key words: Traditional medicine; Complementary and Integrative Medicine; scientific evidence; knowledge

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Chinese medicine diagnosis and treatment for COVID-19: Is China ready for implementing a national guideline

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Introduction: COVID-19 sparked a pandemic in December 2019 and is currently posing a huge impact globally. Chinese herbal medicine is incorporated into the Chinese national guideline for COVID-19 management, emphasising the individualisation of herbal treatment guided by pattern differentiation, which is an ICD-11-endorsed approach. However, this was not widely implemented with many provincial governments and hospitals developing their own guideline, suggesting the use of standardised herbal formulae and herbal active ingredients without pattern differentiation.

Methods: Through the case study of COVID-19 guideline implementation, we compared the three approaches of developing Chinese herbal medicine, namely pattern differentiation-guided prescription, standard-

ised herbal formulae, and herbal active ingredients, in terms of their strengths, limitations, and determinants of adoption.

Results: Pattern differentiation-guided prescription is the practice style taught in the national syllabus among universities of Traditional Chinese Medicine in China, yet the lack of relevant diagnostic research reduces its reliability and hinders its implementation. Application of standardised herbal formulae is straightforward since the majority of clinical evidence on Chinese herbal medicine is generated using this approach. Nevertheless, it is downplayed by regulatory bodies in certain jurisdictions where the use of pattern differentiation is required in routine practice. Although herbal active ingredients may have clear in vitro therapeutic mechanisms, this may not be translated into real world clinical effectiveness.

Conclusions: Multiple COVID-19 clinical trials evaluating the effectiveness and safety of Chinese herbal medicine prescribed using one of the three approaches described above are progressing. These results will demonstrate the comparative effectiveness among these approaches. Forthcoming clinical evidence from these trials should inform the updating process of the national guideline, such that its recognition and compliance may be strengthened. For longer-term development Chinese herbal medicine, serious investment for establishing high-quality clinical research infrastructure is urgently needed.

Keywords: Chinese herbal medicine; COVID-19; China; Health policy; ICD-11, The eleventh edition of the International Classification of Diseases; Traditional Chinese Medicine.

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COVID-19 and herbal medicine: A practitioner survey

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Introduction: COVID-19 has had a large impact upon UK society and healthcare, however little is currently known about its impact upon UK herbal medicine practice. This survey aimed to identify: changes to herbal medicine practice since the start of the pandemic, common herbs used to support people with COVID-19 symptoms and types of advice patients are seeking from herbal practitioners.

Methods: We developed a mixed-methods e-survey for herbal practitioners, disseminated in June 2020 through practitioner professional bodies and social media. Quantitative results were analysed descriptively and qualitative results were analysed using basic content analysis.

Results: Findings from 59 complete responses indicated that most practitioners have moved to phone or video consultations only, whilst 37% had observed a decline in patients with other conditions. 56% respondents reported seeing patients with COVID-19 symptoms and 27% seeing patients with a COVID-19 diagnosis. Herbal practitioners reported that patients most commonly asked for information about herbs to support the immune system (46/59, 78%) and herbs to support them during COVID-19 symptoms (36/59, 61%), although the percentage of patients asking for COVID-19 advice varied. Practitioners described using a range of herbs to support people with COVID-19 symptoms, most commonly Glycyrrhiza glabra L. (15/31, 48%), Echinacea spp. (13/31, 42%) and Andrographis paniculata (Burm.f.) Nees (8/31, 26%). Practitioners also recommended vitamin D (14/29, 48%) and C (8/29, 28%). Herbal practitioners' main sources of information about COVID-19 were webinars from other herbalists (56%), research databases (58%) and NHS guidance (49%).

Conclusions: The COVID-19 pandemic has had a substantial impact upon herbal medicine practice. Herbal practitioners are a source of information and support for patients with COVID-19 symptoms. However, herbal medicines used varied widely. Future research needs to evaluate these herbal medicines and to develop a comprehensive database on herbal substances used and their potential benefits and risks.

Keywords: Herbal medicine, COVID-19, survey; herbal practitioners; practice delivery

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Antiviral activity of *Matricaria chamomilla* in the treatment of COVID-19: Molecular Docking study

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Introduction: SARS-CoV-2 infection is a lethal disease caused by a Novel strain of coronaviruses. Although vaccinations of healthy people and meticulous treatment of infected people are the main global health concerns, some plant species have therapeutic effects against viral infections. *Matricaria chamomilla* is one of the most famous medicinal plants used to manage flu or flu-like symptoms due to its antiviral bioactivity. *M. chamomilla* belongs to a large group of medicinal herbs used by Persian scholars such as Avicenna and Rhazes to treat respiratory diseases. It has more than 120 chemical constituents, including terpenoids, flavonoids, and some components with potential medicinal activity. In this study, the inhibitory effect of 2 major flavonoid components of *M. chamomilla*, apigenin and luteolin, was studied for the main protease protein of SARS-CoV-2.

Methods: Molecular docking studies were performed using an in-house batch script (DOCKFACE) of Auto Dock 4.2. The 3D structures of the selected flavonoids were retrieved from PubChem, and each ligand was optimized with MM+ then AM1 minimization method using HyperChem 8. The 3D crystal structure of the main protease protein of SARS-CoV-2 (PDB ID: 6LU7) was obtained from the Protein Data Bank (<http://www.rcsb.org/pdb>).

Results: Apigenin and luteolin exhibited good docking scores against 6LU7 receptor, -7.86 and -7.24, respectively, with a combination of hydrogen bonding, van der Waals, and other hydrophobic interactions in the docked complexes. Besides, the estimated inhibition constants, K_i , showed that luteolin exhibited a better inhibitory effect than apigenin.

Conclusions: Based on these results, the authors proposed that *M. chamomilla* can be considered as a valuable resource recommended for preventing SARS-CoV-2 invasion into the human body.

Keywords: COVID-19, *M. chamomilla*, Persian medicine, Molecular Docking, Herbal medicine

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Use of CAM during the first wave of the COVID-19 Pandemic: A Cross-sectional Survey

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Introduction: The COVID-19 pandemic lockdown has a profound impact on physical and mental well-being throughout the world. Previous studies have revealed that complementary and alternative medicine (CAM) is frequently used for and can be potential beneficial for strengthening physical and mental resilience. The aim of this study was therefore to determine the prevalence and associations for use of CAM during the first wave of the COVID-19 pandemic among a representative sample of women and men in Norway.

Methods: Computer assisted telephone interviews using an adapted questionnaire (I-CAM-QN) were conducted with 1000 randomly selected Norwegians aged 16 and above using multistage sampling in April and May 2020 applying age and gender quotas for each area. Descriptive statistics were carried out using Pearson's Chi-square test, Fisher exact test, and Independent samples T-tests to identify group differences.

Results: The study revealed that two thirds of the respondents (67%) had used CAM within the first three months of the COVID-19 pandemic, in particular CAM modalities that did not involve a provider. Most used were CAM natural remedies and dietary supplement (57%), mainly vitamins and minerals (43%), but self-help practices like yoga and meditation were also widely used (24%). Women used these therapies significantly more than men (77% vs. 58%).

Conclusions: In summary, it can be concluded that the first wave of the COVID-19 pandemic has not profoundly changed the overall need of Norwegian citizens to seek for care outside the conventional healthcare system, but rather has caused a shift in the type of CAM modalities used. It remains to be investigated whether this changed pattern is maintained during the whole period of the pandemic.

Keywords: Survey, Norway, CAM, COVID-19

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Traditional, Complementary and Integrative Medicine Use during the COVID-19 Outbreak in Hong Kong

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Introduction: Little evidence is available to support the use of traditional, complementary and integrative medicine (TCIM) during the COVID-19 pandemic. This study investigated the frequency and patterns of TCIM use during the pandemic and identified factors associated with its use among the general population in Hong Kong.

Methods: An online cross-sectional survey was conducted from November to December 2020. The survey solicited information on the respondents' (1) sociodemographic characteristics, (2) risk perception of the pandemic, (3) use of TCIM before and during the pandemic, and (4) perceived effectiveness of TCIM. Logistic regression analysis was conducted to determine the potential predictors of TCIM use.

Results: TCIM was used by 48.5% (n=306/632) of respondents before the pandemic, and decrease significantly to 44.0% (n=278/632) during the pandemic (P=0.007). The greatest declines were in the rates of Chinese herbal medicine, acupuncture and massage/TuiNa. During the pandemic, the most popular forms of TCIM were vitamins or other dietary supplements (n=160, 25.3%) and Chinese herbal medicine (n=122, 19.3%). Respondents who reported using TCIM were more likely to be female (odds ratio[OR]=1.82, 95% confidence interval [CI]=1.29–2.59), to have attained a higher education level (OR=2.21, 95% CI=1.39–3.59), and older-aged (age >55 years: OR=1.77, 95%