Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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search identified, four COVID-19 RCTs with 572 participants and 7 registered RCTs. These results will be included in the next update.

Conclusion: Preliminary evidence suggests there may be a role for zinc in the COVID-19 pandemic. Further research and regular updating of the evidence is warranted.

Keywords: Zinc, Complementary medicine, Common cold, Respiratory infections, Viral infections, COVID-19

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Add-on Chinese Medicine for Coronavirus Disease 2019 (COVID-19): A Retrospective Cohort

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Introduction: Previous studies showed that the effect of antivirals for COVID-19 was promising but varied across patient population, and was modest among severe cases. Chinese Medicine (CM) was extensively used to treat COVID-19 in China. We aimed to evaluate the real-world effectiveness of add-on semi-individualized CM during the outbreak.

Methods: A retrospective total sampling cohort of 1788 adult confirmed COVID-19 patients were recruited from all 2235 consecutive records retrieved from 5 hospitals in Wuhan during 15 January to 13 March 2020. Consultation notes, laboratory/imaging investigations, pharmacy and prognosis records were linked by an electronic medical record system and verified by at least 2 researchers independently. The mortality of add-on semi-individualized CM users and non-users was compared by inverse probability weighted hazard ratio (HR) and by propensity score matching. Change of biomarkers was compared between groups and the frequency of CMs used was analysed. Subgroup analysis was performed to stratify disease severity and dose of CM exposure. Sensitivity analyses were conducted to test the robustness. Change of key biomarkers and the prescription were analysed.

Results: The crude mortality was 3.8% in the semi-individualized CM user group and 17.0% among the non-users. Add-on CM was associated with a mortality reduction of 58% (HR=0.42, 95% CI: 0.23 to 0.77) among all COVID-19 cases and 66% (HR=0.34, 95% CI: 0.15 to 0.76) among severe/critical COVID-19 cases demonstrating dose-dependent response, after inversely weighted with propensity score. The result was robust in various stratified, weighted, matched, adjusted and sensitivity analyses. Severe/critical patients received add-on CM had a trend of stabilized D-dimer level after 3-7 days of admission when compared to baseline. Anti-inflammatory, immunomodulating and anti-asthmatic CMs were most used.

Conclusion: Add-on semi-individualized CM was associated with significantly reduced mortality demonstrating dose-dependent response, especially among severe/critical COVID-19 patients. Chinese medicine should be considered as an add-on regimen for trial use.

Keywords: COVID-19; Chinese Medicine; Retrospective Cohort; mortality;

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Chinese Herbal Medicine Telehealth Outcomes for Symptoms Possibly Related to COVID-19

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Introduction: Given the seriousness of Coronavirus Disease (COVID-19) and long-term sequelae, effective therapies are urgently needed. We are conducting an observational cohort study to describe Chinese herbal medicine (CHM) therapy, outcomes, and safety.

Methods: In this prospective, longitudinal, descriptive cohort study, we will observe participants with symptoms related to COVID-19 who consent to participate in telehealth visits and receive individualized CHM. All participants are asked to obtain a COVID-19 test. Licensed practitioners with at least 20 years’ CHM practice experience will determine the number of telehealth consultations necessary for each participant. All participants are prescribed individualized CHM dispensed either as raw herbs to be decocted at home or granules. Follow-up at 24- and 48-hours after each telehealth visit will provide clinicians with information to determine if an additional telehealth consultation is necessary. Follow-up is at 3, 6, and 12 months.

Results: The study is registered ClinicalTrials.gov NCT04380870 and currently enrolling. Fifty-six participants have enrolled to date: 35 (63%) are female and 21 (37%) male; 45.83 average age (range 22-69). In total, 191 consultations were administered with an average of 3.35 per participant (range 1-9). In the acute phase of illness, the primary symptom reported was fever/chills (23%), fatigue (16%), and sore throat (13%). All but one participant with acute symptoms (n=48) did not progress to long-haul COVID. All long-haul COVID participants (n=7) recovered. No adverse events occurred related to the intervention. One patient was referred to the emergency room out of caution when symptoms did not adequately improve after the initial consult for evaluation.

Conclusion: Describing individualized CHM treatment as a potential COVID-19 therapy will provide vital preliminary feasibility, acceptability, tolerability, effectiveness, and safety data. Findings from our study will inform future controlled trials of individualized CHM therapy for symptoms possibly related to COVID-19.

Keywords: Adverse events, COVID-19, Chinese herbal medicine, Telehealth; Cohort study

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Retrospective Survey of Treatment and Outcomes of COVID-19 in the community

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Introduction: The global COVID-19 pandemic has been associated with high mortality, particularly among the elderly and patients with chronic comorbidities, but the vast majority of affected people are asymptomatic or have only mild symptoms. The aim was to explore as-
sociations between treatments used and reported outcomes in patients who developed symptoms and were tested positive for COVID-19.

Methods: Adult participants were recruited to participate in an online survey from the general public in 13 countries (Brazil, China, Germany, Greece, Iraq, Italy, Mexico, the Netherlands, South Korea, Sweden, Switzerland, UK, USA), between July 2020 and May 2021. In this analysis we include participants who had symptoms of acute respiratory infection and/ or confirmed COVID-19 infection. A retrospective treatment-outcome approach to analyse statistical associations between treatments used and outcomes (duration and severity of symptoms).

Results: Over 54,000 participants completed the online questionnaire, and over 104,000 participants partially answered it. Regression of each outcome on the most frequently used treatments, adjusting for prespecified confounders (including age and comorbidities), will prioritise the treatments associated with the best outcomes.

Conclusion: The treatments associated with the best outcomes could be a priority for further research. However, one cannot conclude that these treatments are effective, because it is difficult to control for all confounders, especially baseline severity of illness.

Keywords: COVID-19; survey; Treatment outcomes; International

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CAM use during the COVID-19 Pandemic: A Population Based International Cross-sectional Survey

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Introduction: This study was initiated to determine consultations with health care providers and use of self-management strategies such as herbal remedies, dietary supplements and self-help techniques for prevention and treatment of COVID-19 related symptoms in countries with a full lockdown (Norway), a partial lockdown (the Netherlands) and no lockdown (Sweden) during the first three months of the COVID-19 pandemic.

Methods: Data were collected in April-June 2020 during the first wave of the COVID-19 pandemic. An adapted version of the I-CAM-Q was used in which the categories ‘for prevention of COVID-19’ and ‘to treat COVID-19-related symptoms were added as reasons for use. Data were collected among a representative sample using data assisted telephone interviews (Norway, n=990 and Sweden, n=500), and an online survey (the Netherlands, n=1004). Total response rate was 30%.

Results: Only a very small number of people in any of the three countries consulted a health care provider with the intention to treat or prevent COVID-19 (1.2% and 1.0% respectively) with medical doctors mostly visited (1.0% and 0.9%). Similarly, the use of self-management strategies to prevent or treat COVID-19 was low (3.4% and 0.2% respectively); most commonly used were vitamins and minerals (2.8%) for prevention of COVID-19, primarily vitamin C (1.7%), vitamin D (0.9%), and multivitamins (0.5%). Consultations with health care providers and use of self-management strategies for prevention of COVID-19 were positively associated with worries of being infected with COVID-19. No such associations were found for worries about loved ones or the perception that COVID-19 is more dangerous than ordinary influenza.

Conclusion: The COVID-19 pandemic does not seem to have evoked a large-scale difference in behaviour related to consultations with health care providers or the use of self-management strategies such as dietary supplements and self-help techniques in any of the three countries, despite different containment and mitigation measures.

Keywords: COVID-19; Consultations with health care providers; Self-management

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Fasting intervention for people with type 1 diabetes (T1D) as patient-initiated research

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Introduction: Integrative medicine in the field of T1D is rare, despite the demands from those who are affected. A patient-initiated pilot study showed the feasibility of a seven-day fasting intervention. The aim was to generate hypotheses and possible endpoints of providing a fasting intervention for further studies.

Methods: Collection of 4 months follow-up data after 7 days of fasting with 19 participants with T1D with regard to anthropometric, psychometric and biochemical parameters from each study participant as well as qualitative interviews with content analysis.

Results: On the psychometric level, the factor “inner peace” from the questionnaire to measure physical well-being (FEW-16) showed significant improvements after 4 months from 2.41 ± 0.98 to 2.81 ± 0.93 (p < 0.001), as did the Conscious Presence and Self Control Scale (CPSC) from 1.75 ± 0.65 to 1.94 ± 0.56 (p = 0.012). WHO-5 values, which had significantly improved during the intervention, showed a no longer significant improvement in the follow-up. 10 participants agreed to participate in qualitative interviews. The content analysis resulted in three main categories: (1) a feeling of increased flexibility in relation to eating, (2) a feeling of improved self-efficacy and (3) post-fasting challenges in blood-sugar self-management. On the physiological level, weight and BMI significantly improved. Significant deterioration did not occur in any area. The improvement of physiological parameters and the subjective perception of the participants suggest that fasting might be able to improve metabolic flexibility, as well as psychological and physiological health. Metabolic flexibility as the ability to switch between different metabolic requirements is increasingly discussed as a relevant preventive and therapeutic outcome.

Conclusion: Given the increasing risk of developing T2D and psychological co-morbidities among people with T1D, fasting might be a relevant intervention for people with T1D. Metabolic flexibility should become an operationalized measure in fasting studies. To include patients’ research questions can foster integrative medicine.

Keywords: Patient led research, type 1 diabetes, fasting, metabolic flexibility; follow up study

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