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PREFACE

Introduction

The library of the Central Council for Research in Homoeopathy has been circulating “Current Health Literature Awareness Service” (CHLAS). The main objective is to disseminate precise information/citation about scientific articles published in various journals/magazine subscribed by this Council.

Scope

This volume covers articles on AYUSH & other systems and Allied Sciences

Arrangement of Entries

The articles are indexed under the name of the authors, arranged in alphabetical order. The entries have been made in the following order:

Author
Title
Name of Journal
year of publication; Volume (issue no.): pagination
Abstract

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Abstract:

**Background:** Bell’s palsy is an idiopathic, acute peripheral palsy of the facial nerve that supplies the muscles of facial expression. Despite an expected 70% full recovery rate, up to 30% of patients are left with potentially disfiguring facial weakness, involuntary movements, or persistent lacrimation. The most frequently used treatment options are corticosteroids and antiviral drugs. However, accompanying clinical conditions, such as uncontrolled diabetes, hypertension, gastrointestinal disturbances, polypharmacy of geriatric patients, and significant sequelae ratios, indicate the need for safe and effective complementary therapies that would enhance the success of the conventional interventions.

**Case summary:** A 26-year-old female presented with numbness and earache on the left side of the face; these symptoms had been ongoing for 8–10 h. Physical examination revealed peripheral facial paralysis of House-Brackmann grade III and corticosteroid-valacyclovir treatment was initiated. On the same day, Kinesio Taping was applied to the affected nerve and muscle area with the aim of primarily neurofacilitation and edema-pain relief. On the fifth day, acupuncture treatment was started and was continued for 3 consecutive days. A physical therapy program was administered for the subsequent 10 days. At the 3-week follow-up examination, Bell’s palsy was determined as grade I, and the treatment was stopped.

**Conclusion:** Acupuncture and Kinesio Taping, in conjunction with physical therapy modalities, are safe and promising complementary therapies for the acute management of Bell’s palsy. However, further large scale and randomized controlled studies are necessary to assess whether these complementary interventions have significant additive or synergistic effect for complete recovery of patients with Bell’s palsy.


Abstract:

**Introduction:** Complementary and alternative medicine (CAM) is commonly used to treat chronic lower back pain. This study aimed to explore CAM use among Turkish patients with chronic lower back pain attending a neuro surgery department hospital.

**Methods:** This cross-sectional study was conducted between September 2015 and January 2016 in the neuro-surgery clinic of the state hospital in Giresun, in northern Turkey. A random sample of patients (n = 182) with at least three months of pain, and whose pain intensity was 3 or higher (on a 0 (without any pain) to 10 (the worst pain possible) scale) were included.

**Results:** The most frequently used complementary and alternative therapy by patients was prayer (87.4%). Massage was the second most common CAM modality. There was a significant difference between pain intensity and participants’ use of prayer and biofeedback (p < 0.05). Pain intensity was associated with an increased use of prayer and biofeedback (p < 0.05) of patients that used CAM modalities. They also reported greater severity.
Conclusions: The most utilized CAM modality in patients with low back pain was prayer which is classified as a mind-body intervention. Our findings suggest that patients with chronic lower back pain in Turkey tend to use complementary and alternative therapies for pain management.


Abstract:

**Introduction:** Previous research suggests the value of self-regulation for facilitating weight-loss behaviors. This study aimed to determine if improved mood has a facilitative effect on the self-regulation of healthy eating and exercise outputs associated within behavioral obesity treatments.

**Methods:** Data were from women with obesity (mean age = 47.1 ± 8.4 years; mean BMI = 35.0 ± 3.2 kg/m²) who previously participated in one of two community-based weight-loss treatment types over 6 months. One supported manual-based education on the need for healthy eating and increased exercise (n = 127). The other focused on self-regulation skills applied first to exercise, then eating behaviors (n = 107). Changes in exercise- and eating-related self-regulation, negative mood, exercise and eating behaviors, and weight were assessed.

**Results:** For both the psychological, exercise, and eating changes, effect sizes for within-group improvements were uniformly larger in the self-regulation group. Weight loss was 2.1% in the education group, and 6.3% in the self-regulation group. Based on 95% confidence intervals, changes in self-regulation over 3 months significantly mediated the prediction of changes in exercise, fruit/vegetable intake, and sweets consumption over 6 months by treatment type. Change over 3 months in mood significantly moderated (p-values ≤ 0.01) the above-indicated association of treatment type with self-regulation change. Mood score at month 3 was also a significant moderator (p-values < 0.05) in the models predicting eating changes. Increased fruit/vegetable intake significantly predicted reduced weight (p = 0.009), and reduced sweets, bread products, and dairy (p-values ≤ 0.01).

**Conclusion:** Findings clarified benefits for targeting self-regulation and mood within behavioral weight-loss treatments that go well-beyond typical processes of providing education on desirable behaviors.


Abstract:

**Background:** The use of complementary and alternative medicine (CAM) among patients with chronic diseases has grown rapidly worldwide. Yet, little has been known about CAM use by elderly patients with chronic diseases in Ethiopia. This study aimed at assessing the prevalence and reasons for CAM utilization among elderly patients living with chronic diseases in Ethiopia.

**Methods:** An institution-based quantitative cross-sectional survey was conducted among elderly patients with chronic disease attending outpatient ambulatory clinics of University of Gondar referral and teaching hospital (UoGRTH). An interviewer-administered and semi-structured questionnaire were utilized to collect the data.

**Result:** Of the total respondents, 240 (74%) reported the use of CAM, with herbal medicine and spiritual healing being the most commonly utilized CAM modalities (50.4% and 40.8% respectively). Dissatisfaction with conventional therapy (40.8%) and belief in the effectiveness of CAM (30.8%) are
the most commonly cited reasons for the use of CAM therapies. Rural residency, higher educational status, higher average monthly income and presence of co-morbidity were positively associated with the use of CAM.

**Conclusion:** This survey revealed a higher rate of CAM use among elderly patients with chronic diseases, along with a very low rate of disclosing their use to their health care providers. Special attention should be given for these patient population due to the potentially harmful interaction of different herbal remedies with the prescribed medications, thereby predisposing the patient to untoward adverse effects and compromised overall health outcome.

**Baatsch Beatrice, Zimmer Stefan, Recchia Daniela Rodrigues et al. Complementary and alternative therapies in dentistry and characteristics of dentists who recommend them. Complementary Therapies in Medicine 2017; 35: 64-69p.**

**Abstract:**

**Objectives:** The aims of this study were to analyse whether dentists offer or recommend complementary and alternative medicine (CAM) remedies in their clinical routine, and how effective these are rated by proponents and opponents. A second aim of this study was to give a profile of the dentists endorsing CAM.

**Design:** A prospective, explorative, anonymised cross-sectional survey was spread among practicing dentists in Germany via congresses, dental periodicals and online (n = 250, 55% male, 45% female; mean age 49.1 ± 11.4 years).

**Results:** Of a set of 31 predefined CAM modalities, the dentists integrated plant extracts from Arnica montana (64%), chamomile (64%), clove (63%), Salvia officinalis (54%), but also relaxation therapies (62%), homeopathy (57%), osteopathic medicine (50%) and dietetics (50%). The effectiveness of specific treatments was rated significantly higher (p < 0.0001) by CAM proponents than opponents. However also CAM opponents classified some CAM remedies as highly effective, namely ear acupuncture, osteopathic medicine and clove. For ear acupuncture these scores did not significantly differ between both groups. With respect to the characteristic of the proponents, the majority of CAM endorsing dentists were women. The mean age (50.4 ± 0.9 vs 47.0 ± 0.9 years) and number of years of professional experience (24.2 ± 1.0 vs 20.0 ± 1.0 years) were significantly higher for CAM proponents than the means for opponents (p < 0.0001 respectively). CAM proponents worked significantly less (p < 0.0001) and their perceived workload was significantly lower (p = 0.008). Their self-efficacy expectation (SEE) and work engagement (Utrecht work engagement, UWE) were significantly higher (p ≤ 0.01 and p < 0.0001) compared to dentists who abandoned these treatment options. The logistic regression model showed (exploratively) an increased association from CAM proponents with the UWES subscale dedication, with years of experience, and that men are less likely to be CAM proponents than women.

**Conclusion:** Various CAM treatments are recommended by German dentists and requested by their patients, but the scientific evidence for these treatments are often low or at least unclear. CAM proponents are often female, have higher SE and work engagement.


**Abstract:**
**Objectives:** Yoga is promoted as an anti-stress activity, however, little is known about the mechanisms through which it acts. The present study investigated the acute effects of a hatha yoga session, displayed on a video, on the response to and recovery from an acute psychological stressor.

**Methods:** Twenty-four healthy young adults took part in a counterbalanced, randomized-crossover trial, with a yoga and a control condition (watching TV). Participants attended the laboratory in the afternoon on two days and each session comprised a baseline, control or yoga task, stress task and recovery. Blood pressure (BP), heart rate (HR) and salivary cortisol responses were measured. State cognitive- and somatic-anxiety along with self-confidence were assessed before and after the stressor.

**Results:** Although no difference in the BP or HR responses to stress were found between conditions, systolic BP ($p = 0.047$) and diastolic BP ($p = 0.018$) recovery from stress were significantly accelerated and salivary cortisol reactivity was significantly lower ($p = 0.01$) in the yoga condition. A yoga session also increased self-confidence ($p = 0.006$) in preparation for the task and after completion. Moreover, self-confidence reported after the stress task was considered debilitative towards performance in the control condition, but remained facilitative in the yoga condition.

**Conclusion:** Our results show that a single video-instructed session of hatha yoga was able to improve stress reactivity and recovery from an acute stress task in healthy individuals. These positive preliminary findings encourage further investigation in at-risk populations in which the magnitude of effects may be greater, and support the use of yoga for stress reactivity and recovery.


**Abstract:**

**Introduction:** The interest in non-pharmacological interventions for insomnia disorder has increased. The aim was to assess the immediate treatment effects of auricular acupuncture (AA) and cognitive behavioural therapy for insomnia (CBT-i) regarding discontinuation of hypnotic usage and symptoms of anxiety, depression and insomnia.

**Method:** Prospective randomised controlled study. Fifty-seven participants (mean age 61 years (SD 8.6)) with insomnia disorder and long-term use of non-benzodiazepine hypnotics received group-treatment with AA or CBT-i. Pre- and post-treatment measures included symptoms of anxiety, depression and insomnia via self-report questionnaires: Hospital Anxiety and Depression scale (HAD-A, HAD-D) and Insomnia Severity Index (ISI). Other sleep parameters and hypnotic consumption were measured with a sleep diary. Linear mixed models were performed to examine treatment effect over time within and between the groups.

**Results:** Seventy-one percent of the AA participants and 84% of the CBT-i participants managed to discontinue their hypnotic drug consumption post-treatment. Symptoms of anxiety and depression decreased within the AA group (HAD-A ($p < 0.05$), HAD-D ($p < 0.05$)) and insomnia symptoms decreased within the CBT-i group (ISI ($p < 0.001$)). The only between-group difference occurred in ISI ($p < 0.001$), in favour of CBT-i. According to the within-group sleep diary results, the CBT-i group went to bed later ($p < 0.001$), fell asleep quicker ($p < 0.05$), increased their sleep efficiency ($p < 0.001$) and self-rated sleep quality ($p < 0.05$) post-treatment.
Conclusions: Both groups ended/maintained low hypnotic drug consumption post-treatment. Short-term reductions occurred in the AA group in anxiety and depression symptoms and in the CBT-i group regarding insomnia symptoms.


Abstract:

Neuropathic pain occurrence is associated with some cytostatic and antibiotics use. Pharmacological therapy for the treatment of neuropathic pain is sometimes unsuccessful, and complementary methods like acupuncture are included. In this case report, a 14-year-old boy with cerebral tumour and neuropathic pain in his feet after chemotherapy and linezolid use is presented. A complete cessation of neuropathic pain symptoms like hyperalgesia and allodynia was accomplished after laser acupuncture application.


Abstract:

*Zingiber cassumunar* Roxb. known locally as “Plai” in Thai, has been used for treating bruise, sprain and musculoskeletal pain. Several pre-clinical studies demonstrated the anti-inflammatory effect of Plai. However, current evidence of clinical effects of Plai is still unclear. This study aimed to determine the clinical efficacy and safety of Plai among all identified indications. Of the 808 articles identified by a systematic review, six studies were included. Four studies were randomized controlled trials, while two studies were quasi-experimental studies involving 178 patients in intervention group and 177 patients in control group. Duration of treatment ranged from 7 days to 2 months. Our findings showed that 14% Plai cream had a strong trend of benefits in pain reduction for muscle pain and ankle sprain. However, evidence supporting the effects of Plai on acne vulgaris treatment and anti-histamine effect are still unclear.


Abstract:

Context: There are no studies on the effect of volunteer-provided hand massage in a busy chemotherapy outpatient practice.

Objective: To assess the feasibility of introducing hand massage therapy into an outpatient chemotherapy unit and to evaluate the effect of the therapy on various symptoms experienced by cancer patients.


Setting: Chemotherapy outpatient clinic of a large tertiary care academic medical center.

Patients/Participants: Forty chemotherapy outpatients.

Intervention: After being approached by a trained volunteer from a hand massage team, patients consented to receive a 20-minute hand massage before chemotherapy that was individualized according to patient preference and expressed needs.
Main Outcome Measures: The visual analog scale (VAS) was used to measure pain, fatigue, anxiety, muscular discomfort, nervousness, stress, happiness, energy, relaxation, calmness, and emotional well-being (on a scale from 0–10) before and after the intervention; a satisfaction survey was administered after the therapy. Patients’ demographic data were summarized with descriptive statistics, and VAS total scores were compared between groups at each time point with the two-group t test. Feasibility was evaluated from the number of patients who were approached, received a hand massage, and completed the study surveys.

Results: Of the 40 participants, 19 were men (mean age, 59.5 years). Significant improvement after hand massage was indicated by VAS scores for fatigue, anxiety, muscular discomfort, nervousness, stress, happiness, energy, relaxation, calmness, and emotional well-being (P < .05). Pain scores also improved, but the difference was not statistically significant (P = .06). All patients indicated that they would recommend hand massage to other patients, and 37 were interested in receiving it during their next chemotherapy treatment.


Abstract:

**Objective:** To study the effect of Anthracinum CH 200 to prevent anthrax in sheep and goats in less and highly endemic villages of Kadapa district, Andhra Pradesh, India was studied.

**Materials and Methods:** This study was conducted in 159,250 sheep and goats, in anthrax-endemic Kadapa district in India, from 2003 to 2008, consecutively covering 1 endemic and 17 less endemic villages. Fifteen millilitres of Anthracinum 200 dilution was mixed thoroughly with 1 L of 2.5% albendazole suspension and drenched orally either with a drenching gun or with a 10-ml syringe, in a single bolus of 10 ml for adults and 5 ml for young ones.

**Results:** All the sheep and goats were protected from Anthrax with a single dose of Anthracinum CH 200 both in non-endemic villages. The ratio of cost of vaccine to cost of Homoeopathic Prophylatic was worked out to be 5.47:1.

**Conclusions:** Homoeopathy is very effective in preventing the anthrax in sheep and goats at a very cheap price and is very safe and has a rapid response.


Abstract:

**Objective:** The objective of the study was to conduct a review of the existing literature on homeopathic research conducted on Vitiligo.

**Materials and Methods:** A comprehensive online and manual search of research studies on vitiligo through Homoeopathy was conducted to identify publications in international search databases and library of Central Council for Research in Homoeopathy published during the period from 2006 to 2016. Relevant research was categorised by study type and appraised according to study design with their clinical outcomes.

**Results:** In this review, 11 articles related to Homoeopathy on vitiligo were identified, of which four clinical observational studies and three case reports were assessed.

**Conclusion:** Studies identify a positive role of Homoeopathy in vitiligo were repigmentation has been reported. The treatment, however, is prolonged and needs to be based on homeopathic
principles of totality and individualized treatment. Further, a larger number of studies on convincing evidence-based parameters including validated scales are essential requirements to document the usefulness of Homoeopathy in vitiligo.


**Abstract:**

**Objectives:** To investigate the influence of work-related characteristics, health, health behaviours and symptoms on ingestible biologically-based Complementary and Alternative Medicine (CAM) use within the Australian nursing and midwifery workforce.

**Background:** CAM use is widespread worldwide, but there is little research into nurses’ and midwives’ personal use of ingestible CAM in Australia.

**Methods:** An online survey in 2014–15 used validated instruments and items to examine use of ingestible biologically-based CAM (herbs, foods and vitamins, minerals, amino acids, enzymes and other supplements), and the health and work-related characteristics of 5041 nurses and midwives recruited through the New South Wales Nurses and Midwives Association and professional networks.

**Results:** A small proportion of nurses (6.8%) identified as personal CAM users. Most were female, older, worked in foundational roles (frontline Registered and Enrolled Nurses/Midwives) and used one CAM, most commonly a multivitamin, although Vitamin D, Fish Oil, Calcium and Glucosamine ± Chondroitin were also common. In comparison to non-users, CAM users were less likely to take sick days or indulge in risky drinking, but more likely to be symptomatic (with stiff joints, bodily/joint pain, severe tiredness, allergies, indigestion/heartburn), diagnosed with osteoarthritis and to adhere to healthy diet recommendations.

**Conclusions:** Findings showed a credible pattern of front line workers with physically demanding workloads that impact their physical health and are linked to frequent symptoms, using CAM treatments and achieving some success in being able to continue working and avoid sickness absence. Further investigation is warranted to protect and maintain the health of the nursing and midwifery workforce.


**Abstract:**

**Background:** The protective effect of mistletoe extract (Helixor®, HLX) against methotrexate (MTX)-induced acute oxidative stress and nephrotoxicity in rats was evaluated by histological and biochemical methods as well as the comet assay.

**Material and Methods:** 32 female Wistar albino rats were divided into 4 groups: control group, HLX group (5 mg/kg body weight (bw), days 1-10, intraperitoneally (i.p.)), MTX group (10 mg/kg bw, days 7, 8, and 9, i.p.), and MTX + HLX group (10 mg/kg bw, days 7, 8, and 9, i.p. + 5 mg/kg bw, days 1-10, i.p.). At the end of the experiment, the glutathione peroxidase (GSH-Px), superoxide dismutase (SOD), nitric oxide (NO), and myeloperoxidase (MPO) levels were measured, and a histopathological analysis and comet assay were carried out. Results: MTX induced renal oxidative stress and nephrotoxicity in the rats. Pretreatment with HLX significantly improved the renal GSH-Px and SOD activities in the MTX + HLX group compared to the MTX group. The decrease in the NO and MPO levels in the rat groups pretreated with HLX was not significant. The histochemical evaluation revealed that
HLX provided significant improvement in the MTX-induced renal degenerative changes, including tubule distension, interstitial inflammation, perirenal inflammation, glomerular congestion, glomerular degeneration, and parenchymal hemorrhage, in the MTX + HLX group compared to the MTX-administered group. According to the comet assay, pretreatment with HLX lowered the MTX-induced DNA damage in endogenous lymphocytes, although not significantly.

**Conclusion:** This study demonstrated that HLX administration markedly reduced the MTX-induced acute oxidative stress and nephrotoxicity in rats through its antioxidant and anti-inflammatory properties.

**Haile Kaleab Taye, Ayele Asnakew Achaw, Mekuria Abebe Basazn et al. Traditional herbal medicine use among people living with HIV/AIDS in Gondar, Ethiopia: Do their health care providers know? Complementary Therapies in Medicine 2017; 35: 14-19p.**

**Abstract:**

**Background:** People living with HIV/AIDS (PLWHA) are increasingly using herbal remedies due to the chronic nature of the disease, the complexities of treatment modalities and the difficulty in adhering to the therapeutic regimens. Yet, research on herbal medicine use in this patient population is scarce in Ethiopia. The present study aimed at investigating the prevalence and factors associated with the use of traditional herbal medicine among PLWHA in Gondar, Ethiopia.

**Methods:** A cross sectional survey was conducted on 360 PLWHA attending the outpatient clinic of University of Gondar referral and teaching hospital from September 1 to 30, 2016. A questionnaire about the socio-demographic, disease characteristics as well as traditional herbal medicine use was filled by the respondents. Descriptive statistics, univariate and multivariate logistic regression analyses were performed to determine prevalence and correlates of herbal medicine use.

**Results:** Out of 360 respondents, 255 (70.8%) used traditional herbal medicine. The most common herbal preparations used by PLWHA were Ginger (*Zingiber officinale*) (47%), Garlic (*Allium sativum* L.) (40.8%) and Moringa (*Moringa stenopetala*) (31.4%). Majority of herbal medicine users rarely disclose their use of herbal medicines to their health care providers (61.2%). Only lower educational status was found to be strong predictors of herbal medicine use in the multivariate logistic regression.

**Conclusions:** The use of herbal medicine among PLWHA is a routine practice and associated with a lower educational status. Patients also rarely disclose their use of herbal medicines to their health care providers. From the stand point of high prevalence and low disclosure rate, health care providers should often consult patients regarding herbal medicine use.

**Hamrick Irene, Mross Paul, Christopher Nate et al. Yoga’s effect on falls in rural, older adults. Complementary Therapies in Medicine 2017; 35: 57-63p.**

**Abstract:**

**Background:** Unintentional falls affect 30% of people over age 65 years. Yoga has been shown to improve balance. We designed this study to examine if yoga reduces falls.

**Methods:** We conducted 16 sessions of Hatha yoga over 8 weeks. Participants were randomly assigned to practice 10 min of yoga daily at home in addition to 5-min relaxation exercises or relaxation exercises only (control group).

**Results:** Of the 38 participants completing the intervention, 15 participants reported a total of 27 falls in the 6-months before the study, compared to 13 participants sustaining 14 falls in the 6 months
from the start of the study \((p < 0.047)\), without difference between yoga home-exercise and home relaxation-only groups.

Compared to baseline scores, all participants improved on the Berg Balance Scale \((53–54\text{ out of }56, p = 0.002)\), the Functional Gait Assessment \((22.9–25.8\text{ out of }30\text{ points}, p < 0.001)\), and the Dynamic Gait Index \((20.6–22.4\text{ out of }24\text{ points}, p < 0.001)\). Right leg stand time improved from a mean of \(13.3\text{ s to }17.1\text{ s} \,(p = 0.020)\) and standing forward reach distance from \(26.0\text{ cm to }29.6\text{ cm} \,(p < 0.001)\). Without difference between groups.

Confidence, with the Activities-specific Balance Confidence Scale, increased in the yoga home-exercise group \((88\%–93\%, p = 0.037)\) compared to 90\% unchanged from pre-intervention in the home relaxation-only group.

**Conclusion:** Yoga classes reduce self-reported falls and improve balance measures. The addition of home yoga exercises did not enhance benefit over relaxation exercise only.

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**Abstract:**

**Introduction:** Most patients experience moderate to severe anxiety before coronary angiography. The use of complementary approaches may be helpful for managing patients’ anxiety before invasive procedures. This study aimed to investigate the impact of hand reflexology on patients’ anxiety before coronary angiography.

**Methods:** In this randomized placebo controlled clinical trial, 90 patients (45 patients in intervention and placebo groups) who were candidates for coronary angiography for the first time were recruited. Twenty minutes prior to the coronary angiography procedure, hand reflexology was given to the intervention group. The patients in the placebo group received general hand massage without any stimulation of reflexology points. Data were collected using the Spielberger anxiety inventory.

**Results:** The mean state anxiety level in the intervention group decreased from \((49.82 \pm 1.74)\) at baseline to \((42.67 \pm 1.47)\) after the intervention \((p = 0.0001)\). The groups did not show any significant differences in trait anxiety comparing scores before and after the intervention.

**Conclusion:** Hand reflexology alleviated anxiety without any adverse effects on patients before coronary angiography. Therefore, it can be recommended as a non-pharmacological nursing intervention along with other methods to relieve patients’ anxiety. However, future studies with a larger sample size is needed to further examine the efficacy of the hand reflexology intervention on patients’ psychological aspects.

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**Abstract:**
Introduction: The use of Dietary and Herbal Supplements (DHS) is on the rise. It has important safety ramifications, especially among inpatients. We aimed at summarizing the major findings on DHS use among inpatients and identifying areas for future research in the field.

Methods: A literature search for combinations of keywords related to “DHS” and “hospitalization” was conducted for English, French, Spanish and Hebrew papers in Medline, Embase, CISCOM, Cochrane Library, Clinical Key and Google Scholar with no restrictions in term of country of study.

Results: We identified 472 articles, 42 of which met our criteria. Narrative analysis of these articles revealed several findings: DHS use is common worldwide among inpatients from various socio-economic and medical backgrounds. DHS are consumed mostly by women, older and educated patients with the goal of relieving medical conditions. Patients tend not to disclose DHS use to primary care and hospital medical staff and physicians generally do not document their use in hospital files. Risks from DHS include side effects, potential and actual interactions with prescription drugs and substitution for medications.

Conclusions: Gaps in knowledge regarding DHS include their use by hospitalized patients in developing countries; specific association between comorbidities and DHS use; assessment of actual side effects from DHS; barriers to physician inquiry on DHS use; and DHS documentation. DHS use by inpatients is extensive and involves safety as well as medicolegal considerations. Although much has been learned on this topic, further research is needed on the conduct of both patients and physicians regarding DHS.


Abstract

Introduction: The functional magnetic resonance imaging (fMRI) Stroop task could be used to study brain activity changes during treatment for Alzheimer’s disease (AD). The aim was to observe the brain functional activity changes during the treatment for AD patients with Yishen Huazhuo Decoction (YHD) using an fMRI Stroop task.

Methods: Thirty-five mild AD patients were randomized into either a treatment group or a control group in order to observe the brain activity before and after the treatment.

Results: Before the treatment, the activated regions were bilateral cerebellar hemispheres and bilateral frontal occipital lobe. After the treatment, the activated regions of bilateral cerebellar hemispheres and bilateral frontal occipital lobes decreased for patients in control group, but the activated regions were larger than that in treatment group, and there appeared deactivated regions in the bilateral prefrontal lobes, left orbitofrontal gyrus and right inferior parietal lobe; the activated state of bilateral anterior cingulate gyri, bilateral superior, middle, and medial frontal gyri, left middle-superior frontal gyrus, right middle-superior frontal gyrus, and bilateral posterior cingulate gyri significantly decreased after treatment compared with before treatment in control group.

Regions of higher brain functional activity changes in YHD treatment group were observed in the control group were; left anterior central gyrus, left middle-inferior frontal gyrus, bilateral medial frontal gyri, left anterior cingulate gyrus, bilateral superior frontal gyri, left middle frontal gyrus, left superior-middle frontal gyrus.
**Conclusions:** We used an fMRI Stroop task to investigate the brain functional activity changes during the treatment of AD patients by YHD, and we found that YHD could improve brain activity of AD patients.


**Abstract:**

**Background and objectives:** Complementary health approaches (CHA) are widely used among children with autism spectrum disorder (ASD). As part of shared treatment decision-making, healthcare providers are encouraged to discuss CHA with parents of children with ASD. Yet prior research suggests that parents often do not disclose CHA used for children, and their reasons for nondisclosure are poorly understood. We, therefore, aimed to identify barriers and facilitators to parent disclosure of CHA used for children with ASD.

**Design and setting:** In-depth interviews were conducted with 31 parents who reported that they were currently using CHA for their child’s ASD in Denver, Colorado or Portland, Oregon.

**Results:** We used content analysis to identify six main themes indicating that the following factors play a role in disclosure: parents’ drive to optimize their child’s health, parent self-efficacy discussing CHA with healthcare providers, parent beliefs about the effectiveness of CHA, parent-provider relationship quality, provider attitudes and knowledge regarding CHA and ASD, and visit characteristics.

**Conclusions:** Study findings suggest that family and health system factors, together, influence parent disclosure of CHA used for children with ASD. Multifaceted intervention concurrently targeting the CHA-related knowledge, beliefs, and self-efficacy of parents whose children have been recently diagnosed with ASD, in addition to the CHA-related attitudes and knowledge of their healthcare providers may promote disclosure and shared treatment decision-making about the use of CHA.


**Abstract:**

**Introduction:** Despite technological advancement in the modern medical system, our world is experiencing an unexpected rise in different chronic diseases, health disorders, allopathic treatment side effects and lifestyle problems. The tourism industry has encapsulated medical and health tourism segments into its scope when countries across the globe now witness an aging population. Little is yet known about changing preferences, motivation to travel, and demands of modern medical tourists recently. The present study aims to explore shifts in medical tourism and the demands for Traditional and Complementary Medicine (T&CM) methods of treatment.

**Methods:** A scoping review of academic articles, published reports, and media literature was undertaken to define the emerging demands of medical tourists and available medicine and health systems in the medical tourism industry. Out of 264 identified sources that were reviewed, 112 met the inclusion criteria for the review.

**Results:** This review demonstrates that natural treatments are being considered by medical tourists as well as allopathic treatments (a conventional western approach based on surgeries and drugs) and tourism attractions. However, the existence of an allopathic system of treatment still contributes to emerging medical system where no T&CM treatment alternatives are available.
Conclusion: A robust medical tourism system, if established by integrating natural treatments, T&CM, allopathic treatments, and tourism can achieve the best of all available health treatment systems and contribute to public health. These results provide a useful contribution to the understanding of the trends in medical tourism.


Abstract:

Introduction: Herbal medicine and other forms of complementary and alternative medicine (CAM) are used to treat symptoms of psychiatric disorders in the United States, including anxiety and mood problems. In Traditional Tibetan Medicine anxiety and depression are commonly treated with an herbal compound known as Agar-35.

Objective: The objective of this pilot study was to explore whether Agar-35 tea would improve anxiety, affect, stress, and rumination.

Methods: Undergraduate psychology students (N=14) were randomized to drink either Agar-35 tea (n=6) or placebo tea (n=8) for 7 nights.

Results: The results indicated that Agar-35 significantly reduced participants’ negative affect compared to placebo, U = 6.0, p = .019, effect size, r = .63. Further, Agar-35 also reduced anxiety (trending toward significance), U = 10.0, p = .071, effect size, r = .48.

Conclusion: In accordance with its use in Tibetan Medicine, these preliminary findings suggest that Agar-35 may benefit aspects of psychological health.


Abstract:

Cholesfytol®, a lipid-lowering dietary supplement with antioxidant and anti-atherosclerotic properties, combines red yeast rice (RYR) and olive extract (5 mg hydroxytyrosol equivalent) and represents an alternative for patients who do not wish or are unable to use chemical statins, including individuals with previous statin-associated muscle symptoms (SAMS). A 2-months observational non-randomized study was performed to evaluate the efficacy, tolerance and safety of Cholesfytol® (1 tablet/day) in 642 hypercholesterolemic patients (mean age: 59 yrs; total cholesterol (TC) ≥200; LDL-C ≥140 mg/dl). Patients were followed by 126 GPs, and included irrespective of SAMS history and/or diabetes. None of the patients were taking statins or other lipid-modifying therapy at inclusion. At baseline, 26% had fasting glucose >100 ≤125 mg/dL, and 5% >125 mg/dL; 32% (n = 194) had a SAMS history; and 21% had atherogenic dyslipidemia (AD). In the entire cohort, pre-treatment TC; non-HDL-C; LDL-C; and TG were 259; 200; 168; 158 mg/dL, respectively, and decreased significantly on treatment (~17.5% (TC) and ~23.3% (LDL-C)). Fasting glucose and HbA1c decreased between visits. The reduction in lipids was greater in patients with higher values at baseline. For comparable pre-treatment values, patients with SAMS history had reductions in TC, LDL-C, non-HDL-C, and apoB100 slightly less than patients without myalgia. AD patients had greater on-treatment decrease in TG. Overall, 13 patients reported minor side-effects, and 4 patients reporting myalgia had antecedent SAMS. In conclusion, a substantial decrease in LDL-C was obtained.
with a combination of RYR and olive extract in high-risk hypercholesterolemic patients, without inducing new-onset SAMS.

Ostrovsky Daniel A. Yoga may be noninferior to physical therapy for disability and pain at 12 weeks and both might improve function more than education in low resource adults with chronic nonspecific low back pain. Explore: The Journal of Science and Healing 2017; 13(6): 424-26p.


Abstract:

Objective: The aim of this study is to evaluate the antifungal activity of different homoeopathic mother tinctures against the growth of Candida albicans.

Materials and Methods: Homoeopathic mother tinctures (σ) Syzygium jambolanum, Ficus religiosa, Ocimum sanctum, Allium cepa, Thuja occidentalis, Holarrhena antidysenterica and Eucalyptus globulus were evaluated for their antifungal activity against the growth of human pathogenic fungi C. albicans using paper disc agar diffusion method as per guidelines of clinical and laboratory standard (M44-A) with slight modification. The diameters of zone (mm) of inhibition were measured, and the obtained results were compared with that of the vehicle control. Ketoconazole was used as reference standard fungicide.

Results: Seven homoeopathic mother tinctures were used in this study and the results indicates that some of the homoeopathic drugs in the study showed significant inhibitory activity against the growth of C. albicans as compared to control. Out of the seven medicines tested, S. jambolanum showed a maximum zone of inhibition as compared to other mother tinctures used. The effectiveness of zone inhibition against the growth of human pathogenic fungi C. albicans are S. jambolanum > T. occidentalis > A. cepa > F. religiosa > E. globulus > O. sanctum > H. antidysenterica.

Conclusion: The present study suggests the inhibitory role of homoeopathic medicines against human pathogenic fungi C. albicans.


Abstract:

Background: Increased incidence and progression of myopia, especially in Asian countries, have been attributed to excess near work. Topical use of Atropine was effective in controlling myopia but has got side effects and rebound effect after stopping the treatment. Homoeopathy mentions Ruta graveolens (Ruta) for myopia with its action on accommodation.

Aim: The aim of the study is to evaluate the effect of Ruta on annual myopia progression rate (AMPR) before, during and after stopping treatment in childhood myopia.

Materials and Methods: Ten cases of simple myopia in progressive stage aged 11–16 years were studied retrospectively. Myopia or spherical equivalent of refraction (SER) and AMPR in diopters (D) before treatment were assessed from the previous refraction reports. Ruta 3C was used in BD dose orally for 2 years with a gap of 7 days after every 21 days, and thereafter, treatment was discontinued. Subjective refraction on Snellen’s chart at the start, during and after stopping treatment was
recorded. From SER values, AMPR at different phases of study was assessed and analysed with paired \( t \)-test.

**Results:** Mean AMPR before treatment was \(-1.10\) D (\(\pm 0.53\)). After Ruta treatment, there was a significant reduction of \(-0.27\) D (\(\pm 0.32\)) in AMPR (\(t = -4.13, P = 0.003\)). After stopping the treatment for an average of 10 months, mean AMPR was \(-0.46\) D (\(\pm 0.49\)), but this change was insignificant (\(t = 1.21, P = 0.26\)).

**Conclusion:** Homoeopathic Ruta 3C was effective in controlling AMPR with no major progression after stopping the treatment.


**Abstract:**

**Objective:** A previous experiment suggested that consumption of intentionally treated tea influenced subjective mood under double-blind, controlled conditions. To investigate that effect objectively, again under double-blind, controlled conditions, we studied whether Arabidopsis thaliana seeds hydrated with intentionally treated vs. untreated water would show differences in hypocotyl length, anthocyanin, and chlorophyll.

**Design:** Three Buddhist monks focused their intention on commercially bottled water with the goal of improving the growth of seeds; bottled water from the same source served as an untreated control. Seeds with the following three variations of cryptochrome (CRY) were used: the wild type Arabidopsis(Columbia-4), a gain-of-function mutation (His-CRY2), and a loss-of function mutation (cry1/2), where “gain” and “loss” refer to enhanced and reduced sensitivity to blue light, respectively. Seeds were hydrated with treated or untreated water under blinded conditions, and then placed in random positions in an incubator. The germination process was repeated three times in each experiment, each time using new seeds, and then the entire experiment was repeated four times.

**Results:** Data combined across the four experiments showed a significant decrease in hypocotyl length in the His-CRY2 seedlings (treated mean 1.31 ± 0.01 mm, untreated mean 1.43 ± 0.01 mm, \(P < 10^{-13}\)), a significant increase in anthocyanin with all three forms of cry, particularly His-CRY2 (treated mean 17.0 ± 0.31 mg, untreated mean 14.5 ± 0.31 mg, \(P < 10^{-4}\)), and a modest increase in chlorophyll in His-CRY2 (treated mean 247.6 ± 5.63 mg, untreated mean 230.6 ± 5.63 mg, \(P = .05\)). These outcomes conformed to the monks’ intentions because a decrease in hypocotyl length and increase in anthocyanin and chlorophyll are associated with enhanced photomorphogenic growth. These experiments suggest that the His-CRY2 mutation of Arabidopsis may be an especially robust “detector” of intention.


**Abstract:**

**Introduction:** Traditional medicine plays an important role in the primary healthcare of people residing in forest areas and selling raw herbal products provides livelihood opportunities. In view of this, an extensive survey was undertaken among local people and herbalists in Sathyamangalam...
forests of Western Ghats, India in order to conduct a quantitative analysis of traditional knowledge about herbal medicines practiced along with their market potential.

**Methods:** Data associated with the information collected from ethnic people were analysed using the frequency of citations. During the survey period, 45 informants were identified who had much knowledge on practicing herbal medicines.

**Results:** A total of 78 plants representing 41 families and 68 genera were recorded to treat 40 types of ailments. Of these 64 species were sold by traders, local people and herbalists in herbal markets. Also 71 species of documented plants were included in the list of traded Indian plants.

**Conclusion:** Our study exhibited the importance of plant sources to human welfare which can serve as a key for discovery of potential new drugs. Through the results of our explorative field survey and previous reports, Andrographis alata, Aristolochia bracteolata, Aristolochia tagala, Bulbophyllum fuscopurpureum, Canarium strictum, Cinnamomum tamala, Curculigo orchioides, Ipomoea obscura, Mucuna pruriens, Pandanus odoardii and Tylophora asthmatica were investigated pharmacologically, as these plants were frequently used by studied ethnic people. So we suggest that there is a need for more future scientific research on these plants to determine their efficacy and safety based on their associated ethnomedicinal uses documented in the present study.


**Abstract:**

**Introduction:** This systematic review aimed to assess the clinical evidence for the widespread use of herbal medicines in treating acute otitis media.

**Methods:** Eleven electronic databases, including MEDLINE, EMBASE, and the CENTRAL were searched, without language limitations. All randomised controlled trials involving the use of herbal medicines, alone or in combination with conventional therapies, for acute otitis media were included.

**Results:** We identified 4956 studies, of which seven randomised clinical trials met the inclusion criteria. The overall risk of bias of the included trials was relatively high or unclear. Treatment with Longdan-xiegan decoction or Shenling-bai Zhu powder, combined with antibiotics, appeared to be more effective than treatment with antibiotics alone in terms of the proportion of patients with total symptom recovery. Moreover, combination treatment of Sinupret® and antibiotics facilitated the recovery of middle ear conditions and hearing acuity.

**Conclusions:** Despite some indications of potential symptom improvement, the evidence regarding the effectiveness and efficacy of herbal medicine for acute otitis media is inconclusive due to the poor quality of trials included. Moreover, we only analysed seven trials in this review. Therefore, to properly evaluate the effectiveness of herbal medicine for acute otitis media, systematic reviews based on more rigorously designed randomized trials are warranted in the future.


**Abstract:**

**Objectives:** The present study aimed to clarify the effects of viewing fresh roses on prefrontal cortex activity, autonomic nervous activity and subjective assessments of psychological relaxation.

**Design:** A crossover design, in which each experimental group crosses over from one treatment to another, was used.
Setting and interventions: A total of 15 female university students (mean age 21.7 ± 1.1 years) viewed fresh roses for 3 min; the control consisted of no experimental stimulus.

Main outcome measures: Physiological effects on prefrontal cortex activity were determined by near-infrared time-resolved spectroscopy, which was assessed by measuring oxyhemoglobin (oxy-Hb) concentration in the left and right prefrontal cortex; effects on autonomic nervous activity were assessed by measuring heart rate variability (HRV) and heart rate. Modified semantic differential method and Profile of Mood States were used to determine subjective evaluations.

Results: Viewing roses induced: 1) a significant decrease in oxy-Hb concentrations in the right prefrontal cortex; 2) a marginally significant decrease in ln[LF/(LF + HF)] of HRV, which is associated with sympathetic nervous activity; 3) a significant increase in perceptions of feeling ‘comfortable,’ ‘relaxed,’ and ‘natural;’ and 4) a significant improvement in mood state.

Conclusions: These findings indicate that visual stimulation with roses induces physiological and psychological relaxation.


Abstract:

Objectives: While use of complementary and alternative medicine (CAM) is common in children, we know little about its use for hospitalized children. This survey measured the rate of CAM use, specific modalities used, and policies related to CAM use for hospitalized children.

Design: Anonymous survey of hospitals in the Pediatric Research in Inpatient Settings (PRĪS) network

Setting: Hospitals in the PRĪS network.

Main outcome measures: Rate of overall and specific CAM modality use, including whether these modalities are provided, permitted, or prohibited, and presence of a written policy on CAM use.

Results: Of 99 sites queried, 22 responded. Of these, 82% of sites reported some CAM presence, and 63% reported official provision of CAM therapies. Freestanding children's hospitals provided more modalities than other types of hospitals. There was no difference in number of modalities by geographic location. The most commonly provided CAM modalities were massage and biofield therapies. The most commonly prohibited modalities were inpatient placebos outside of research settings, medical marijuana, and inpatient homeopathic preparations. Only one site reported having a written policy on CAM use.

Conclusions: Among responding institutions, the most reported some CAM presence with a wide variety of CAM modalities provided and permitted. Written institutional policies on CAM were rare.


Abstract:

Introduction: The main objective of this study is modelling pharmacy students’ acquisition of knowledge-based behavior towards complementary and alternative medicine (CAM) by using
attitude, subjective norm, perceived behavior and intention. To the best of the authors’ knowledge, this is the first study designed for pharmacy students’ acquiring knowledge-based behavior towards CAM in the light of Theory of Planned Behavior (TPB) via structural equation modelling (SEM).

**Methods:** Two-sample independent t-test and one-way analysis of variance (ANOVA) are used to determine significant differences between groups. SEM is used for modelling the pharmacy students’ acquiring knowledge-based behavior.

**Results:** Developed Acquiring Knowledge-Based Behavior towards CAM (AKBC) model provides good fit for the dataset, explaining 56% of the variation in the acquiring knowledge intention of pharmacy students (I), and explaining 32% of the variation within acquiring knowledge-based behavior of pharmacy students (B). According to AKBC model, attitude toward CAM, subjective norm about CAM, and perceived behavior control related to CAM have a booster effect on the acquisition of knowledge intention of pharmacy students towards CAM. In addition, acquisition of knowledge intention of pharmacy students towards CAM practices has a booster effect on the acquiring knowledge-based behavior towards CAM.

**Conclusions:** This study contributes to the literature by developing a structural model for acquiring knowledge-based behavior towards CAM. A variation of the AKBC model is available for modelling the behaviors of practicing pharmacists or academicians.


**Abstract:**

**Objectives:** We investigated the knowledge and characteristics of herbal supplement usage of the customers of community pharmacies in a Malaysian population.

**Design and setting:** Self-administered questionnaires (in English, Malay, or Chinese) were provided to customers at three community pharmacies in Malaysia (Ipoh, Perak). Questionnaire validation and translation validation were performed. A pilot study was conducted before actual questionnaire distribution. Informed consent was obtained from all participants.

**Results:** Total number of participants was 270 (99 males and 171 females) with majority from the 31–50 age group (41.5%). Among the participants, 45.6% were herbal users. The most commonly used herbal supplements were evening primrose oil (17.9%), ginkgo biloba (13.0%), and milk thistle (8.5%). The participants seemed to have sufficient knowledge regarding herbal supplements including safety, quality, and indication of use from medical literature. Participants obtained information about herbal supplements from pharmacists (26.9%), package inserts (25.2%), friends (20.5%), and the Internet (13.3%) more often than from their doctors (9.8%). Most herbal users did not inform their doctors about their usage of herbal supplements (68.3%) or the side effects (61.5%). Herbal supplement users also tended to be women, >50-year-old, and those with higher monthly household incomes.

**Conclusions:** Community pharmacists have a vital role in educating their customers about the safe use of herbal supplements. The participants had sufficient knowledge about herbal supplement usage; therefore, customers of these community pharmacies may have benefitted from the advice of
the pharmacists. Further studies could be carried out in future on the knowledge, skills and roles of community pharmacists in the safe use of herbal supplements.

**Abstract:**

**Background:** The prevalence of insomnia increases with age. Chamomile is among the medicinal plants which are used as tranquilizer. Yet, there is inadequate experimental and clinical evidence regarding its hypnotic effects. This study sought to evaluate the effects of chamomile extract on sleep quality among elderly people.

**Design:** A single-blind randomized controlled trial was performed.

**Setting:** A convenient sample of sixty elderly people who aged sixty or more and lived in Kahrizak day care nursing home, Karaj, Iran, were randomly allocated to a control and a treatment group. The treatment group received chamomile extract capsules (200 mg) twice a day for 28 consecutive days while the control group received wheat flour capsules (200 mg) in the same manner. Using the Pittsburgh Sleep Quality Index, sleep quality was assessed immediately before, two weeks after beginning, immediately after the completion, and two weeks after the completion of the intervention. The data were analyzed via the independent-sample t, Chi-square, and Fisher's exact tests as well as the repeated measures analysis of variance.

**Results:** The means of age in the control and the treatment groups were 70.73 ± 6.44 and 69.36 ± 4.99, respectively. Except for the habitual sleep efficiency component of the Sleep Quality Index, the study groups did not differ significantly from each other at baseline regarding the scores of the other components of the index. Moreover, at baseline, sleep quality in both groups was low, with no statistically significant between-group difference (P = 0.639). However, after the intervention, sleep quality in the treatment group was significantly better than the control group (P < 0.05).

**Conclusion:** The use of chamomile extract can significantly improve sleep quality among elderly people. Thus, it can be used as a safe modality for promoting elderly people's sleep.
**Background:** Infected necrotising pancreatitis is a potentially lethal disease and an indication for invasive intervention. The surgical step-up approach is the standard treatment. A promising alternative is the endoscopic step-up approach. We compared both approaches to see whether the endoscopic step-up approach was superior to the surgical step-up approach in terms of clinical and economic outcomes.

**Methods:** In this multicentre, randomised, superiority trial, we recruited adult patients with infected necrotising pancreatitis and an indication for invasive intervention from 19 hospitals in the Netherlands. Patients were randomly assigned to either the endoscopic or the surgical step-up approach. The endoscopic approach consisted of endoscopic ultrasound-guided transluminal drainage followed, if necessary, by endoscopic necrosectomy. The surgical approach consisted of percutaneous catheter drainage followed, if necessary, by video-assisted retroperitoneal debridement. The primary endpoint was a composite of major complications or death during 6-month follow-up. Analyses were by intention to treat. This trial is registered with the ISRCTN registry, number ISRCTN09186711.

**Findings:** Between Sept 20, 2011, and Jan 29, 2015, we screened 418 patients with pancreatic or extrapancreatic necrosis, of which 98 patients were enrolled and randomly assigned to the endoscopic step-up approach (n=51) or the surgical step-up approach (n=47). The primary endpoint occurred in 22 (43%) of 51 patients in the endoscopy group and in 21 (45%) of 47 patients in the surgery group (risk ratio [RR] 0·97, 95% CI 0·62–1·51; p=0·88). Mortality did not differ between groups (nine [18%] patients in the endoscopy group vs six [13%] patients in the surgery group; RR 1·38, 95% CI 0·53–3·59, p=0·50), nor did any of the major complications included in the primary endpoint.

**Interpretation:** In patients with infected necrotising pancreatitis, the endoscopic step-up approach was not superior to the surgical step-up approach in reducing major complications or death. The rate of pancreatic fistulas and length of hospital stay were lower in the endoscopy group. The outcome of this trial will probably result in a shift to the endoscopic step-up approach as treatment preference.

**Funding:** The Dutch Digestive Disease Foundation, Fonds NutsOhra, and the Netherlands Organization for Health Research and Development.


**Abstract:**

Strange-face illusions are produced when two individuals gaze at each other in the eyes in low illumination for more than a few minutes. Usually, the members of the dyad perceive numinous apparitions, like the other's face deformations and perception of a stranger or a monster in place of the other, and feel a short lasting dissociation. In the present experiment, the influence of the spirituality personality trait on strength and number of strange-face illusions was investigated. Thirty participants were preliminarily tested for superstition (Paranormal Belief Scale, PBS) and
spirituality (Spiritual Transcendence Scale, STS); then, they were randomly assigned to 15 dyads. Dyads performed the intersubjective gazing task for 10 minutes and, finally, strange-face illusions (measured through the Strange-Face Questionnaire, SFQ) were evaluated. The first finding was that SFQ was independent of PBS; hence, strange-face illusions during intersubjective gazing are authentically perceptual, hallucination-like phenomena, and not due to superstition. The second finding was that SFQ depended on the spiritual-universality scale of STS (a belief in the unitive nature of life; e.g., “there is a higher plane of consciousness or spirituality that binds all people”) and the two variables were negatively correlated. Thus, strange-face illusions, in particular monstrous apparitions, could potentially disrupt binding among human beings. Strange-face illusions can be considered as ‘projections’ of the subject’s unconscious into the other’s face. In conclusion, intersubjective gazing at low illumination can be a tool for conscious integration of unconscious ‘shadows of the Self’ in order to reach completeness of the Self.


Abstract:

Background: Biomarkers of intestinal inflammation, such as faecal calprotectin and C-reactive protein, have been recommended for monitoring patients with Crohn's disease, but whether their use in treatment decisions improves outcomes is unknown. We aimed to compare endoscopic and clinical outcomes in patients with moderate to severe Crohn's disease who were managed with a tight control algorithm, using clinical symptoms and biomarkers, versus patients managed with a clinical management algorithm.

Methods: CALM was an open-label, randomised, controlled phase 3 study, done in 22 countries at 74 hospitals and outpatient centres, which evaluated adult patients (aged 18–75 years) with active endoscopic Crohn's disease (Crohn's Disease Endoscopic Index of Severity [CDEIS] >6; sum of CDEIS subscores of >6 in one or more segments with ulcers), a Crohn's Disease Activity Index (CDAI) of 150–450 depending on dose of prednisone at baseline, and no previous use of immunomodulators or biologics. Patients were randomly assigned at a 1:1 ratio to tight control or clinical management groups, stratified by smoking status (yes or no), weight (<70 kg or ≥70 kg), and disease duration (≤2 years or >2 years) after 8 weeks of prednisone induction therapy, or earlier if they had active disease. In both groups, treatment was escalated in a stepwise manner, from no treatment, to adalimumab induction followed by adalimumab every other week, adalimumab every week, and lastly to both weekly adalimumab and daily azathioprine. This escalation was based on meeting treatment failure criteria, which differed between groups (tight control group before and after random assignment: faecal calprotectin ≥250 μg/g, C-reactive protein ≥5mg/L, CDAI ≥150, or prednisone use in the previous week; clinical management group before random assignment: CDAI decrease of <70 points compared with baseline or CDAI >200; clinical management group after random assignment: CDAI decrease of <100 points compared with baseline or CDAI ≥200, or prednisone use in the previous week). De-escalation was possible for patients receiving weekly adalimumab and azathioprine or weekly adalimumab alone if failure criteria were not met. The primary endpoint was mucosal healing (CDEIS <4) with absence of deep ulcers 48 weeks after randomisation. Primary and safety analyses were done in the intention-to-treat population. This trial has been completed, and is registered with ClinicalTrials.gov, number NCT01235689.

Findings: Between Feb 11, 2011, and Nov 3, 2016, 244 patients (mean disease duration: clinical management group, 0.9 years [SD 1.7]; tight control group, 1.0 year [2.3]) were randomly assigned to monitoring groups (n=122 per group). 29 (24%) patients in the clinical management group and 32 (26%) patients in the tight control group discontinued the study, mostly because of adverse events. A significantly higher proportion of patients in the tight control group achieved the primary
endpoint at week 48 (56 [46%] of 122 patients) than in the clinical management group (37 [30%] of 122 patients), with a Cochran–Mantel–Haenszel test-adjusted risk difference of 16·1% (95% CI 3.9–28.3; p = 0.010). 105 (86%) of 122 patients in the tight control group and 100 (82%) of 122 patients in the clinical management group reported treatment-emergent adverse events; no treatment-related deaths occurred. The most common adverse events were nausea (21 [17%] of 122 patients), nasopharyngitis (18 [15%]), and headache (18 [15%]) in the tight control group, and worsening Crohn’s disease (35 [29%] of 122 patients), arthralgia (19 [16%]), and nasopharyngitis (18 [15%]) in the clinical management group.

**Interpretation:** CALM is the first study to show that timely escalation with an anti-tumour necrosis factor therapy on the basis of clinical symptoms combined with biomarkers in patients with early Crohn’s disease results in better clinical and endoscopic outcomes than symptom-driven decisions alone. Future studies should assess the effects of such a strategy on long-term outcomes such as bowel damage, surgeries, hospital admissions, and disability.

**Cottrell Barry. Mind in deep time: Original participation and re-enchantment of the world.** *Explore: The Journal of Science and Healing 2017; 13(6): 400-06p.*

**Abstract:**

This paper describes my experiences exploring consciousness as an artist-engraver, in particular the sense of reawakening the participatory primal mind, which came about through the act of engraving. This ‘original participation’ is viewed as a fundamental characteristic of our early Acheulean ancestors and evidence is presented to show that they possessed both a ‘modern’ esthetic sense and also a prayerful, sacramental consciousness. It is suggested that this primal consciousness is a fundamental human quality that became eclipsed in the modern mind by the denial of participation and the Cartesian split between subject and object during the Scientific Revolution. It is upon this denial of participation and the illusion of objectivity that the whole methodology of natural science and the alienated outlook of contemporary culture is based. A re-enchantment of the world can take place through the re-mythologizing of consciousness and the re-apprehension of original participation.


**Abstract:**

**Introduction:** Coenzyme Q10 (CoQ10), as a supplement with a special role in mitochondrial electron transport chain, has been suggested to have prophylactic effect on migraine attacks. The aim of this randomized, double-blind, placebo-controlled trial was to evaluate the effects of CoQ10 supplementation in the prevention of migraine in conjunction with routine care.

**Methods:** Eighty-four women with episodic migraine based on International Classification of Headache Disorder II were randomly allocated in to two groups to receive either 400 mg/day CoQ10 or placebo beside usual prophylactic drugs. Frequency, severity and duration of attacks and headache disability based on migraine specific questionnaires (Headache Impact Test, Migraine Specific Quality of Life and Migraine Disability Assessment) were assessed at the baseline, after 6 and 12 weeks.

**Results:** Seventy-seven of 84 patients completed the study. The results showed significant effect of CoQ10 supplementation on frequency, severity and duration of attacks (All P < 0.001). The percent changes for frequency, severity and duration of attacks in CoQ10 compared to placebo group were −56.7 vs. −41.9, −46.6 vs. −30.1 and −60.0 vs. −37.8 respectively. The number-needed-to-treat for at
A least 50% reduction in migraine frequency, severity and duration were 4.5, 4.4 and 3.6 respectively. CoQ10 group also had better scores in migraine specific questionnaires at the end of the study compared to control group (All P < 0.001). There were no side-effects noted during the study.

**Conclusion:** We concluded that CoQ10 supplementation provided in addition to current migraine prophylactic agents, is well tolerated and seems to be efficacious over time.


**Abstract:**

**Background & aims:** Blood transfusion therapy is lifesaving for individuals with β-thalassemia major (β-TM). Iron burden following blood transfusion is the main cause of oxidative stress (OS) and organ dysfunction in these patients. The aim of this study was to evaluate the effects of silymarin on serum antioxidant and oxidative status in patients with β-TM.

**Methods:** A crossover, randomized controlled trial was performed on 82 thalassemia patients. In two periods of 12 weeks, patients received 420 mg silymarin (divided into three equal 140-mg daily doses) and placebo. The washout period between the two phases was two weeks. Serum malondialdehyde (MDA), protein carbonyl (CO), total antioxidant capacity (TAC), and reduced glutathione (GSH) were measured before and after both periods.

**Results:** Sixty-nine patients completed the study. Mean serum MDA and protein CO significantly decreased in all patients with β-TM after three months of treatment with silymarin. At the end of the study, serum MDA decreased from 20.36 ± 20.11 to 4.79 ± 4.71 μmol/l (compared to 17.81 ± 16.05 μmol/l after administration of placebo), and protein CO dropped from 0.31 ± 0.28 to 0.11 ± 0.09 mM/l (compared to 0.24 ± 0.17 mM/l with placebo). Additional laboratory parameters (such as serum TAC and plasma GSH) were also significantly elevated after therapy with silymarin. At the end of the study, serum TAC increased in all patients from 620.7 ± 202.64 to 971.83 ± 328.16 μmol FeSO4/l (compared to 672.22 ± 206.88 μmol FeSO4/l with placebo), and GSH increased from 46.16 ± 41.68 to 195.35 ± 210.98 nM/l (compared to 58.52 ± 48.95 nM/l with placebo). The treatment effect of silymarin was measured using a mixed-effects model of variance analysis for changes in MDA, protein CO, TAC, and GSH, with significant effects being demonstrated for each laboratory parameter (P < 0.001, P = 0.002, P < 0.001, and P < 0.001, respectively).

**Conclusions:** Silymarin was effective in decreasing serum OS and enhancing serum antioxidant capability in patients with β-thalassemia major. Silymarin given as an adjuvant therapy to standard iron chelators may provide an improvement in the OS measurements obtained in these patients, with accompanying benefit.


**Abstract:**

**Background & objective(s):** Global prevalence of type 2 diabetes (T2D) is very high and is currently growing alarmingly. With respect to recent researchers’ attention to the potential role of herbal medicine in disease prevention and management, the present meta-analysis review investigates the effectiveness of Nigella sativa (N. sativa), a popular herb, in T2D.

**Methods:** Literature search was conducted covering PubMed/Medline, Scopus, and Cochrane Registry of Clinical Trials up to February 2017 to obtain the relevant published intervention studies.
Study selection, quality rating and data extraction of studies were investigated by two independent reviewers. Heterogeneity was assessed using I-squared ($I^2$) statistics test. Subgroup analysis was done to assess type of N. sativa supplement as source of heterogeneity. Effect sizes of eligible studies were pooled using STATA software version 12 (STATA corp, College Station, TX, USA).

Results: Seven trials were included in the meta-analysis of glycemic and serum lipid profile endpoints. Supplementation with N. sativa significantly improved fasting blood sugar (FBS) [-17.84 mg/dl, 95% CI: -21.19 to -14.49, p < 0.001], HbA1c [-0.71%, 95% CI: -1.04 to -0.39, p < 0.001], total-cholesterol (TC) [WMD: -22.99 mg/dl, 95% CI: -32.16 to -13.83, p < 0.001] and LDL-cholesterol (LDL-c) [-22.38 mg/dl, 95% CI: -33.60 to -11.15, p < 0.001]. The overall effects for triglyceride (TG) [-6.80 mg/dl, 95% CI: -33.59 to 19.99, p = 0.61] and HDL-cholesterol (HDL-c) [0.37 mg/dl, 95% CI: -1.59 to 2.33, p = 0.71] were insignificant. Subgroup analysis revealed significant reduction on TG with N. sativa seed oil [-14.8 mg/dl, 95% CI: -23.1 to -6.5, p < 0.001], while TG was increased with seed powder [29.4 mg/dl, 95% CI: 16.9–42.0, p < 0.001]. All measures, but HbA1c, showed no evidence of publication bias.

Conclusion: Although, the meta-analysis conducted included a few number of studies, but has shown promising results on the effectiveness of N. sativa on glucose homeostasis and serum lipids. Current findings suggest N. sativa supplementation a suitable choice in managing the complications of T2D, although future researches are necessary.


Abstract:

Objective: Myofascial pain syndrome (MPS) is a common disorder characterized by muscle pain if myofascial trigger points (MTrP) are stimulated. This study evaluated the effectiveness of far-infrared ray (FIR) patches in reducing the severity of pain in patients with MPS.

Methods: A double-blind, randomized controlled study involving 125 patients with MPS and 201 MTrPs located in the trapezius muscle. A FIR patch was applied to 98 MTrPs for 24 h in the intervention group (61 patients) and a placebo patch was applied to 91 MTrPs in the control group (57 patients) at the end. Pain intensity was measured using the visual analogue scale (V) while pressure pain threshold (P) and maximal pain tolerance (T) were measured using an algometer before and after treatment.

Results: The mean age of the patients was 37.16 years old and 67% were female. There was a positive correlation between P and T (p < 0.001). Older Age was associated with higher P and T due to poor skin sensitivity (p < 0.001). V improved significantly in both groups to a similar extent, but only in the intervention group, P and T decreased significantly (which implied better skin sensitivity) (p < 0.05). P and T decreased the most in the female group aged over 35, probably due to thinner skin in this subgroup.

Conclusions: FIR and placebo patches were equally effective at relieving pain (with decreased V), but P and T dropped only in the intervention group with FIR patches. This probably resulted from FIR penetrated only to the skin layer and improved skin sensitivity with more blood circulation, but
the muscle remained unaffected. Further studies should investigate the effect of longer exposure or higher energy applications.


**Abstract:**

Coeliac disease occurs in about 1% of people in most populations. Diagnosis rates are increasing, and this seems to be due to a true rise in incidence rather than increased awareness and detection. Coeliac disease develops in genetically susceptible individuals who, in response to unknown environmental factors, develop an immune response that is subsequently triggered by the ingestion of gluten. The disease has many clinical manifestations, ranging from severe malabsorption to minimally symptomatic or non-symptomatic presentations. Diagnosis requires the presence of duodenal villous atrophy, and most patients have circulating antibodies against tissue transglutaminase; in children, European guidelines allow a diagnosis without a duodenal biopsy provided that strict symptomatic and serological criteria are met. Although a gluten-free diet is an effective treatment in most individuals, a substantial minority develop persistent or recurrent symptoms. Difficulties adhering to a gluten-free diet have led to the development of non-dietary therapies, several of which are undergoing trials in human beings.


**Abstract:**

**Objectives:** Little is known about the acceptance of non-pharmacological group strategies delivered to low income racially diverse patients with chronic pain and depression. This paper examines how the Integrative Medical Group Visit (IMGV) addresses many of the deficits identified with usual care.

**Design and setting:** Six IMGVs cohorts were held at a safety net hospital and two federally funded community health centres. Data was gathered through focus groups. Transcripts were analysed using both a priori codes and inductive coding.

**Intervention:** The intervention included ten sessions of Integrative Medical Group Visits with a primary care provider and a meditation instructor. The curriculum uses principles of Mindfulness Based Stress Reduction and evidence based integrative medicine. The visit is structured similarly to other group medical visits.

**Main outcome measures:** Data was gathered through four focus groups held after the cohorts were completed.

**Results:** Participants (N = 20) were largely low income minority adults with chronic pain and comorbid depression. Six themes emerged from the coding including: chronic pain is isolating; group treatment contributes to better coping with pain; loss of control and autonomy because of the unpredictability of pain as well as dependence on medication and frequent medical appointments; groups improve agency and control over one’s health condition; navigating the healthcare system and unsatisfactory treatment options; and changes after the IMGV due to non-pharmacological health management.

**Conclusions:** The IMGV is a promising format of delivering integrative care for chronic pain and depression which addresses many of the problems identified by patients in usual care.


**Abstract:**

**Background:** Inflammatory bowel disease is a global disease in the 21st century. We aimed to assess the changing incidence and prevalence of inflammatory bowel disease around the world.

**Methods:** We searched MEDLINE and Embase up to and including Dec 31, 2016, to identify observational, population-based studies reporting the incidence or prevalence of Crohn’s disease or ulcerative colitis from 1990 or later. A study was regarded as population-based if it involved all residents within a specific area and the patients were representative of that area. To be included in the systematic review, ulcerative colitis and Crohn’s disease needed to be reported separately. Studies that did not report original data and studies that reported only the incidence or prevalence of paediatric-onset inflammatory bowel disease (diagnosis at age <16 years) were excluded. We created choropleth maps for the incidence (119 studies) and prevalence (69 studies) of Crohn’s disease and ulcerative colitis. We used temporal trend analyses to report changes as an annual percentage change (APC) with 95% CI.

**Findings:** We identified 147 studies that were eligible for final inclusion in the systematic review, including 119 studies of incidence and 69 studies of prevalence. The highest reported prevalence values were in Europe (ulcerative colitis 505 per 100 000 in Norway; Crohn’s disease 322 per 100 000 in Germany) and North America (ulcerative colitis 286 per 100 000 in the USA; Crohn’s disease 319 per 100 000 in Canada). The prevalence of inflammatory bowel disease exceeded 0.3% in North America, Oceania, and many countries in Europe. Overall, 16 (72.7%) of 22 studies on Crohn’s disease and 15 (83.3%) of 18 studies on ulcerative colitis reported stable or decreasing incidence of inflammatory bowel disease in North America and Europe. Since 1990, incidence has been rising in newly industrialised countries in Africa, Asia, and South America, including Brazil (APC for Crohn’s disease +11.1% [95% CI 4.8–17.8] and APC for ulcerative colitis +14.9% [10.4–19.6]) and Taiwan (APC for Crohn’s disease +4.0% [1.0–7.1] and APC for ulcerative colitis +4.8% [1.8–8.0]).

**Interpretation:** At the turn of the 21st century, inflammatory bowel disease has become a global disease with accelerating incidence in newly industrialised countries whose societies have become more westernised. Although incidence is stabilising in western countries, burden remains high as prevalence surpasses 0.3%. These data highlight the need for research into prevention of inflammatory bowel disease and innovations in health-care systems to manage this complex and costly disease.


**Abstract:**

Chagas disease is an anthropozoonosis from the American continent that has spread from its original boundaries through migration. It is caused by the protozoan *Trypanosoma cruzi*, which was identified in the first decade of the 20th century. Once acute infection resolves, patients can develop chronic disease, which in up to 30–40% of cases is characterised by cardiomyopathy, arrhythmias, megaviscera, and, more rarely, polyneuropathy and stroke. Even after more than a century, many challenges remain unresolved, since epidemiological control and diagnostic, therapeutic, and prognostic methods must be improved. In particular, the efficacy and tolerability profile of
therapeutic agents is far from ideal. Furthermore, the population affected is older and more complex (e.g., immunosuppressed patients and patients with cancer). Nevertheless, in recent years, our knowledge of Chagas disease has expanded, and the international networking needed to change the course of this deadly disease during the 21st century has begun.

**Peter Borchmann, Helen Goergen, Carsten Kobe et al. PET-guided treatment in patients with advanced-stage Hodgkin's lymphoma (HD18): Final results of an open-label, international, randomised phase 3 trial by the German Hodgkin Study Group. Lancet 2017; 390(10114): 2790-2802p.**

**Abstract:**

**Background:** The intensive polychemotherapy regimen eBEACOPP (bleomycin, etoposide, doxorubicin, cyclophosphamide, vincristine, procarbazine, and prednisone in escalated doses) is very active in patients with advanced-stage Hodgkin's lymphoma, albeit at the expense of severe toxicities. Individual patients might be cured with less burdensome therapy. We investigated whether metabolic response determined by PET after two cycles of standard regimen eBEACOPP (PET-2) would allow adaption of treatment intensity, increasing it for PET-2-positive patients and reducing it for PET-2-negative patients.

**Methods:** In this open-label, randomised, parallel-group phase 3 trial, we recruited patients aged 18–60 years with newly diagnosed, advanced-stage Hodgkin's lymphoma in 301 hospitals and private practices in Germany, Switzerland, Austria, the Netherlands, and the Czech Republic. After central review of PET-2, patients were assigned (1:1) to one of two parallel treatment groups on the basis of their PET-2 result. Patients with positive PET-2 were randomised to receive six additional cycles of either standard eBEACOPP (8 × eBEACOPP in total) or eBEACOPP with rituximab (8 × R-eBEACOPP). Those with negative PET-2 were randomised between standard treatment with six additional cycles of eBEACOPP (8 × eBEACOPP) or experimental treatment with two additional cycles (4 × eBEACOPP). A protocol amendment in June, 2011, introduced a reduction of standard therapy to 6 × eBEACOPP; after this point, patients with positive PET-2 were no longer randomised and were all assigned to receive 6 × eBEACOPP and patients with negative PET-2 were randomly assigned to 6 × eBEACOPP (standard) or 4 × eBEACOPP (experimental). Randomisation was done centrally using the minimisation method including a random component, stratified according to centre, age (<45 vs ≥45 years), stage (IIB, IIIA vs IIIB, IV), international prognostic score (0–2 vs 3–7), and sex. eBEACOPP was given as previously described; rituximab was given intravenously at a dose of 375 mg/m2 (maximum total dose 700 mg). The primary objectives were to show superiority of the experimental treatment in the PET-2-positive cohort, and to show non-inferiority of the experimental treatment in the PET-2-negative cohort in terms of the primary endpoint, progression-free survival. We defined non-inferiority as an absolute difference of 6% in the 5-year progression-free survival estimates. Primary analyses in the PET-2-negative cohort were per protocol; all other analyses were by intention to treat. This trial was registered with ClinicalTrials.gov, number NCT00515554.

**Findings:** Between May 14, 2008, and July 18, 2014, we recruited 2101 patients, of whom 137 were found ineligible before randomisation and a further 19 were found ineligible after randomisation. Among 434 randomised patients (217 per arm) with positive PET-2, 5-year progression-free survival was 89·7% (95% CI 85·4–94·0) with eBEACOPP and 88·1% (83·5–92·7) with R-eBEACOPP (log-rank p=0·46). Patients with negative PET-2 randomly assigned to either 8 × eBEACOPP or 6 × eBEACOPP (n=504) or 4 × eBEACOPP (n=501) had 5-year progression-free survival of 90·8% (95% CI 87·9–93·7) and 92·2% (89·4–95·0), respectively (difference 1·4%, 95% CI −2·7 to 5·4). 4 × eBEACOPP was associated with fewer severe infections (40 [8%] of 498 vs 75 [15%] of 502) and organ toxicities (38 [8%] of 498 vs 91 [18%] of 502) than were 8 × eBEACOPP or 6 × eBEACOPP in PET-2-negative patients. Ten treatment-related deaths occurred: four in the PET-2-positive cohort...
(one [<1%] in the 8 × eBEACOPP group, three [1%] in the 8 × R-eBEACOPP group) and six in the PET-2-negative group (six [1%] in the 8 × eBEACOPP or 6 × eBEACOPP group).

**Interpretation:** The favourable outcome of patients treated with eBEACOPP could not be improved by adding rituximab after positive PET-2. PET-2 negativity allows reduction to only four cycles of eBEACOPP without loss of tumour control. PET-2-guided eBEACOPP provides outstanding efficacy for all patients and increases overall survival by reducing treatment-related risks for patients with negative PET-2. We recommend this PET-2-guided treatment strategy for patients with advanced-stage Hodgkin’s lymphoma.

**Funding:** Deutsche Krebshilfe, Swiss State Secretariat for Education and Research, and Roche Pharma AG.


**Abstract:**
These case reports focus on a rapid treatment for persistent complex bereavement disorder and posttraumatic stress disorder (PTSD), which appears to activate the mirror neuron network. Simulated reattachment is a technique which has been found to repair phantom limb pain in just a few sessions. The same neuroplasticity that accomplishes phantom pain relief has been found to occur in the treatment of complicated grief and PTSD using similar methods. The simulated reattachment for the client in Case one was found to significantly reduce the symptoms of both complicated grief and obsessive–compulsive disorder (OCD) within one session. In Case two, symptoms of PTSD and depression were significantly reduced in a client with lupus after two sessions of simulated reattachment. In addition, inflammatory markers antinuclear autoantibodies (ANA) and C-reactive protein (CRP) declined from the beginning of treatment to the end.

**Rowland Kate. You don't know me.** *Lancet 2017; 390(10114): 2869-70p.*


**Abstract:**

**Objectives:** This study aimed to measure the effects of a dance training program on subjective and objective balance and gait measures in a person with Parkinson’s disease.

**Design and Setting:** The participant was measured via clinical scales and biomechanical balance and gait analyses pre- and post-16 weeks of dance participation at the University Center for Arts in Medicine. The dance program consisted of 75 minute sessions three days a week.

**Results:** Improved clinical scales included the Schwab and England scale (+10%), falls efficacy scale (−11 points), six-minute walk (+15.54 m), and timed up and go (1.38 s). Balance measures during three conditions (eyes open, eyes closed, and narrow stance) all demonstrated an increase (24–112%) in center of pressure path length, velocity (anteroposterior and mediolateral), sway area, and approximate entropy (anteroposterior and mediolateral). Spatiotemporal gait parameters improved during forward walking: velocity (+0.12 m/s), cadence (+3.89 steps/min), double support
time (−2.02%), stride length (+0.07 m), stride time (−0.03 s), and backward walking: single support (+3.47%), double support (−7.0%), swing time (+3.4%), and stance time (−3.4%).

**Conclusions:** Classic interpretation of the above measures may indicate a detriment in biomechanical balance effects concomitant with an improvement in gait. Alternative explanations explored suggest this paradox to be illusory.