GSTAM2022
Global Summit on Traditional and Alternative Medicine
April 28-29, 2022
Virtual

The Scientistt
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Dear Colleagues,

It is a great pleasure to announce that The Scientistt will host the Global Summit on Traditional and Alternative Medicine (GSTAM2022) will be held in Tokyo, Japan during April 28-30, 2022.

GSTAM2022 aims to bring together the renowned researchers, scientists and scholars to exchange ideas, to present sophisticated research works and to discuss hot topics in the field and share their experiences on all aspects of Traditional and Alternative Medicine.

The GSTAM2022 will be a 3 days event that means to gather the key players of the Traditional and Alternative Medicine community and related sectors. This event is launched with the aims to become an established event, attracting global participants, intent on sharing, exchanging and exploring new avenues of Traditional Chinese Medicine, Pathology and Clinical Medicine, Herbal Medicine, History and Philosophy of Herbal Medicine, Phytovigilance of Herbal Medicines, Medicinal & Aromatic Plants -related scientific and commercial developments.

A wide-ranging scientific program consisting of plenary lectures, keynote lectures, Invited lectures, parallel sessions, as well as poster sessions for young scientists covering all topics in Traditional Chinese Medicine, Pathology and Clinical Medicine, Herbal Medicine, History and Philosophy of Herbal Medicine, Phytovigilance of Herbal Medicines, Medicinal & Aromatic Plants will be scheduled. This conference provides a wonderful opportunity for you to enhance your knowledge about the newest interdisciplinary approaches in Traditional and Alternative Medicine.

Moreover, the conference offers a valuable platform to create new contacts in the field of Traditional and Alternative Medicine, by providing valuable networking time for you to meet great personnel in the field.

We look forward to seeing you at GSTAM2022 in Tokyo, Japan
# GSTAM2022
Global Summit on Traditional and Alternative Medicine
April 28-29, 2022

## COMMITTEES

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Virtual Presentations
Brief History and Present Situation of Kampo Medicine

Yoshinori Kobayashi
Ph.D, Kitasato University, Japan

Abstract
Kampo medicine is a traditional Japanese herbal medicine. It originated in ancient Chinese medicine, which was imported to Japan in the 6th or 7th century. Based on advanced knowledge and abundant clinical experience, it was uniquely improved in the Japanese style and established as Kampo medicine. Some Kampo extract products have been used as prescription drugs (ethical drugs), covered by Japan's National Health Insurance, since the 1940s. Thus, Kampo medicine is widely used by doctors as a complementary and integrative medicine in addition to conventional medicine. Currently, 148 Kampo formulations (678 products) are registered with the Japanese insurance system and are used as government-regulated prescription drugs. In addition, several herbs can be selected from 243 herbal medicines and used in decoctions. According to the Ministry of Health, Labour and Welfare's Annual Report on Statistics of Production by Pharmaceutical Industry in 2014, the total amount of pharmaceutical production in Japan is about 6589.8 billion yen worth. Kampo products accounted for 2.2 percent of the total pharmaceuticals production in Japan. And is worth about 162.6 billion yen. After the start of basic kampo education in the Model Core Curriculum for Medical Education (2001), and Pharmacy Education (2002), all the medical students and pharmacy students in Japan receive basic kampo education now. As for the Adverse Drug Events Reporting System in Japan, pharmaceutical companies, attending physicians, and pharmacists are required to report adverse events associated with all the medicine including Kampo medicine to the Pharmaceuticals and Medical Devices Agency (PMDA, established in 2004) when they are first discovered, including those where the cause is suspected or a causal relationship cannot be denied. The Ministry of Health, Labor and Welfare (MHLW) has been publishing adverse event data on ethical drugs and OTC drugs every four months on its website since 2003. Thus, Kampo medicine is widely used by Western-style physicians as a complementary and integrative medicine in addition to conventional medicine.

Short Bio
Professor of Pharmacognosy, Kitasato University, School of Pharmacy, Tokyo, Japan, 2007 to present
Vice Director General, Oriental Medicine Research Center, Kitasato University, Tokyo, Japan, 2019 to present
Director of Pharmacy, Oriental Medicine Research Center, Kitasato University, 2015 to present.
Director of Medicinal Plant Garden, Kitasato University, 2013 to present.
Associate Professor, Department of Life Sciences, Niigata University of Pharmacy and Applied Life Sciences, 2002 to 2006
laboratory chief, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co. Ltd., Tsukuba, Ibaraki, Japan, 2000 to 2001
Senior Scientist, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co. Ltd., Tsukuba, Ibaraki, Japan, 1993 to 1999
Scientist, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co. Ltd., Tsukuba, Ibaraki, Japan, 1990 to 1993
Identification and mechanism study of novel bioactive compounds isolated from Garcinia plants

Hong-Xi Xu*
School of Pharmacy, Shanghai University of TCM, Shanghai 201203, China

Abstract
Garcinia species, which have been studied for more than 70 years, comprise a large genus of tropical evergreen trees and shrubs that are widely distributed throughout Southeast Asia and Southern Africa. This genus consists of 450 species, of which 22 species are found across China. Xanthones, polycyclic polyprenylated acylphloroglucinols (PPAPs) and benzophenones are the major compounds obtained from these species, and exhibit anti-tumor, anti-inflammatory and anti-viral activities. Our comprehensive and systematic research on Chinese Garcinia plants could be traced back to 2005. So far, we have isolated more than 400 compounds, including over 230 novel components. Through using analytical chemistry, molecular biology, proteomics, computational chemistry and modern pharmacology techniques, we confirmed that PPAPs such as Oblongifolin C (OC) and Guttiferon K (GUTK) isolated from Garcinia yunnanensis Hu and Cambogin isolated from Garcinia esculenta have significant anti-tumor and anti-inflammatory activities. In the past decade, we have published over 95 SCI papers on Garcinia species. We have also obtained 7 US patents and 15 Chinese patents. At present, we are focusing resources on large-scale preparation of active compounds, chemical structure modification, anti-tumor, anti-inflammation and anti-viral molecular mechanism research of the bioactive compounds. Our study provides theoretical guidance for the utilization of natural compounds and lays the groundwork for the development of new drugs.

Biography
Professor XU Hongxi has been actively involved in Natural Products research in various institutions in Japan, Singapore, Canada and Hong Kong. He has been appointed as a distinguished professor of Shanghai University of Traditional Chinese Medicine since 2011 and is currently the Honorable Dean of the School of Pharmacy. In recognition of his achievements, Professor Xu was selected as a “Specially-Appointed Professor of Shanghai”. Prof. Xu has published more than 350 SCI papers. His H index is 68 and i10-index is 257. His current research interest is focused on new drug discovery from natural resources, as well as the development of botanical dietary supplements from herbal medicines. Specifically, he is interested in finding natural lead compounds from medicinal plants and in developing new drug based on Chinese medicines against different disease targets such as cancer, HSV, and metabolic diseases.
Paradigm Shift: Personalised Holistic Diagnostics of the Spondylarthritis Group

Dr. med. Henriette Muraközy
Chief Physician  Rheumaklinik Dr. Lauven Bad Oeynhausen, Germany

Abstract
Introduction
By means of a paradigm shift in the rheumatology, a personalised expansion of the holistic diagnostics and differential diagnostics of all development phases of spondylarthritis psoriatica form circle (usually with a bland course and low serological activity), taking into account of overlapping syndromes and comorbidities to enable early diagnosis and initiation of therapy to prevent progression of this disease group.

Methods
Personalised, complex ‘rheumatism check’ of the holistic MeSaCoSa complex medical diagnostic and therapeutic concept, creation of an anonymised case register, multifaceted clinical assessment, personalised examination of genetic and epigenetic predisposition factors, biomarker analyses (genotype, phenotype, haplotype diagnostics, complete HLA-B - Typing, molecular genetic PCR-SSP method, detection in short-range gel), immune- and infection- serology (molecular mimicry principle) of infection-triggered pathomechanisms, radiology, functional imaging: power doppler sonography, MRI, BDM.

Patients
7,000 patients in the preclinical, subclinical, prodromal and classifiable phases of the psoriatic spondylarthritis disease group. 15 years (2007-2021) interval. Country: NRW / Germany Controls: a) comparison with genetics of healthy bone marrow donors b) Patients with rheumatic disorders - both of groups from the same geographic region.

Statistical analysis
Results
Significant improvement in all investigated disease development phases and levels of diagnostic and therapeutic results, progression prophylaxis, functional capacity and maintenance of work ability/jobs.

Summary
The paradigm shift, use of personalised 'rheumatism check' method i. R. d. MeSaCoSa complex holistic medical diagnostic and therapeutic concept, with complex rheumatological early diagnosis (predisposing genetic and epigenetic factor and biomarker analysis, among other things with prognostic significance) can eliminate the otherwise known years of diagnosis delay, thus accelerate an early, targeted therapy and a progression prophylaxis in diseases PsA form circle with improvement of the functional capacity and, if necessary, preservation of the ability to work of those affected as well as cost reduction of the anti-rheumatic therapy measures.
Hibiscus sabdariffa: its effect on the pharmacokinetic profile and antihypertensive potency of Captopril

F.C. Saputri1*, S.A. Nurfaradilla1 and Y. Harahap2

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2Laboratory of Bioavailability and Bioequivalent, Faculty of Pharmacy, Universitas Indonesia, Kampus UI Depok 16424, West Java, Indonesia.

Abstract
Hibiscus sabdariffa L. (Malvaceae) is a traditional medicinal herb widely consumed as a beverage (“hibiscus tea”), and its global popularity is expanding due to health benefits such as blood pressure and cholesterol control. However, some studies have shown that H. sabdariffa L. is co-administered with antihypertensives and antihyperlipidemics, thus predisposing herb-drug interactions. Hence, the potential interaction between herb and drug should be evaluated to avoid decreasing the therapeutic effect. The pharmacokinetic interaction between H. sabdariffa L. aqueous extract and captopril, a frequently prescribed antihypertensive, and the pharmacodynamic alteration on blood pressure and renin-angiotensin system (RAS) biomarkers in the rat two-kidney-one-clip (2K1C) model of hypertension, have been investigated.

Pharmacokinetic study was performed on four groups of rats. Group I received captopril (CAP; 4.5 mg/200 g BW), while group II, III, and IV received co-administration of H. sabdariffa (HS) aqueous extract (15 mg/200 g BW, 30 mg/200 g BW, and 60 mg/200 g BW respectively) and captopril 4.5 mg/200 g BW. Blood pressure and biomarker level of RAS measurement were performed on another 7 groups, a SHAM group and six 2K1C groups. In 2K1C animals, hypertension was induced by placing a stainless micro clip (inner diameter of 0.20 mm) on left renal artery. The 2K1C animals consist of negative control (2K1C, no treatment), positive control (captopril 4.5 mg/200 g BW), HS aqueous extract (30 mg/200 g BW), and three co-administration groups receiving HS aqueous extract (15, 30, or 60 mg/200 g BW) plus 4.5 mg/200 g BW captopril. All treatments were performed for two weeks.

Pharmacokinetic profile of captopril was changed significantly by all co-administration doses of HS aqueous extract. The AUC 0-t, AUC 0-∞, and Cmax value of those groups were decreased, conversely the Cl/F and Vd/F value were increased. Blood pressure was significantly reduced by all the drug treatments approaching the level of SHAM controls. Plasma renin level, serum angiotensin converting enzyme (ACE) activity, and plasma angiotensin II level were also significantly elevated in the 2K1C group compared to the SHAM group. Both serum ACE activity and plasma angiotensin II level were significantly reduced approaching the SHAM group levels by all the drug treatments. HS aqueous extract can reduce blood pressure but may not provide any additional benefit. Therefore, we can conclude that co-administration of HS aqueous extract with captopril could affect the pharmacokinetic profile significantly, however it doesn’t have significant effect on the decrease in blood pressure and RAS biomarker level.

Keywords
Hibiscus Sabdariffa; Captopril; Herb-Drug Interaction; Pharmacokinetic; Hypertension; Renin-Angiotensin System

References
Supercritical Properties of Linseed Oil as Revealed from High Pressure and Temperature Studies

Aleksandra Drozd-Rzoska
Institute of High Pressure Physics Polish Academy of Sciences ul. Sokolowska 29/37, 01-142 Warsaw, Poland

Abstract
Linseed oil contributes to reducing the risk of high blood pressure, atherosclerosis, heart diseases and positively stimulate the immune system-. It in-deep moisturizes and nourishes the skin. Are these beneficial properties only a matter of ingredients, such as unsaturated fatty acids, chlorophyll, flavonoids,…? Broadband dielectric spectroscopy studies yield insight into static and dynamic dielectric properties, such as dielectric constant and loss curve peak indicating the ability to solvation, interactions, diffusion. The Figures present such temperature- and pressure-related studies, revealing the unknown critical-like behavior - associated with hidden semi-continuous phase transitions. Their impacts propagate to ambient conditions. The finding recalls the innovative supercritical technology employed via the gas-liquid critical point. Hence, Linseed Oil at ambient condition is influenced by supercritical phenomena matched to the liquid-liquid transition. Consequently, one can expect that the supercritcity can notably tailor the unique properties of Linseed Oil. This result can also open new routines technological process which employs Linseed oil.

Keywords
Vegetable Oils; Linseed; Properties; Supercritical Phenomena; Dielectric Spectroscopy

References

Biography
Dr. hab. Aleksandra Drozd-Rzoska is Adiunct (Assoc. Prof.) in the Institute of High Pressure

The Current Interests
- Soft Matter physics with the focus on liquid crystals, supercooled systems, glasses, polymers, and first of all food as the model very complex soft mater system
- Cosmetics & soft matter chemical physics
- Experimental methods: broadband dielectric spectroscopy, high pressures, nonlinear dielectric spectroscopy, Kerr effects, heat capacity
- Modeling linking the physics of critical phenomena and the glass transition physics
Medicinal Plant Species from Brazilian Biodiversity as Templates for Medicinal Chemistry

Vanderlan da S. Bolzani
Institute of Chemistry, São Paulo State University-UNESP Av. Prof. Francisco Degni, 55 - Jardim Quitandinha, Araraquara - SP, Brazil-14800-900

Abstract
Plant species biosynthesize a wide variety of secondary metabolites, which play a vital role in the survival of the species themselves as well as in the preservation of ecological equilibrium of the ecosystems. They also are very important to regulate several functions that are fundamental to the plant/plant and plant/insect interaction, resistance against pests and diseases, attraction of pollinators, and interaction with symbiotic microorganisms. Therefore, natural compounds are treasure for drug discovery. Brazil hosts huge biodiversity distributed across several important biomes and ecosystems and contains 10 to 20% of the world's known living species, many of which have not been any study described. Some examples of our program on natural products from Brazilian biodiversity, including medicinal plants, resulted in 640 natural products of different classes, several with significant pharmacological activity. This work has stimulating the group a new venture – the establishment of the 1st natural products data base from the Brazilian biodiversity NuBBEDB. Natural products, orbides and cyclotides are some examples, which were selected to be presented and discussed in this conference.
Alternative Medicine for Tourism Industry

Prof. Manana VASADZE
Georgian Technical University (GTU), Tbilisi, Georgia

Abstract
Georgia has significant geographical location that contains unique recreational resources necessary for tourism development that include: Climate, Balneology, sea, snow-glaciers, speleology, mineral waters, forest resources and other components of nature that are of interest to tourists, for one reason or another.

Particularly suitable for healing purposes Climatic conditions are identified in the low- (500-1000 m sea / d) and medium (1000-1500 m sea / d) resort zones, where the popular climatic resorts are located. Up to 2,400 mineral springs have been registered in Georgia, with a total daily flow of more than 130 million liters.

Georgia, with its abundant and diverse thermal, mineral waters and healing mud deposits, can easily compete with the world’s leading health and wellness destinations. Spa factors used for therapeutic purposes are closely related to each other and have a complex impact on the human body. These factors are mainly used in combination with physiotherapy, therapeutic exercise, diet therapy and other methods of treatment.

Drinking mineral waters are successfully used in Georgia for the treatment of the following diseases: chronic gastritis, chronic enteritis and colitis, chronic diseases of the bile ducts and liver, chronic pancreatitis, Peptic ulcer disease of the stomach and duodenum, Gout and uric acid diathesis. Drinking iron-containing waters are used to treat iron deficiency anemia.

Seaside resorts attract a lot of tourists. Black Sea Ureki beaches are characterized by a favorable feature in the form of magnetic sands, which possess important healing properties. These sands contain up to 4% magnetite and titanium magnetite, which creates a constant magnetic field. These properties have a positive effect on the cardiovascular system and the body of children. Besides, they are used in the treatment of diseases of the pelvis and thighs.

Climate -therapy is indicated for the diseases of the cardiovascular system. Climate-therapy in mountain conditions also has contra-indications. Mineral waters with total mineralization up to 1 g / dm3, as well as weak, low, medium and high mineralized waters are used for baths and other balneology and spaprocedures.

From ancient times wine was considered a gift from the gods. In the mythologies of the Mediterranean countries the ancient physicians described the “gift of the gods” in medicine.

Winemaking is a top tourist attraction. “Wine Tour” is a Basic concept. A wine tour is created and wrapped around the concept of wine. However, since diversity makes any tourism product highly desirable and enjoyable, the ideal tour is a mix of wine, cultural, cognitive and adventure tourism, the planning of which requires a special, Non-standard, innovative approach.

The wine spa is created to encourage the development of tourism in the Kakheti region and to showcase the unique properties of Kakhetian wine and grapes at the international level. The Wine Spa is located in a magnificent natural environment specially designed and adapted to the wine therapy. The procedure is used for preventing premature aging of the skin and body rejuvenating.
Acupuncture in Quality of Life of Rheumatoid Arthritis

D. Seixas¹, F. Farinha², and M. Rua³

¹ICBAS, University of Porto, Portugal.
²Clinical Immunology Unit, Oporto Hospital Center, Portugal.
³Center for Research in Didactics and Technology in Training Trainers, University of Aveiro, Portugal.

Abstract

Nowadays, both in research and in clinical practice, the treatment paradigm is based on the “treat-to-target” strategy, which aims at planning, implementing and achieving the state of remission or at least a decrease in disease activity as early and consistently as possible. (1) Acupuncture, accredited by the WHO, is indicated as an effective therapy in promoting the quality of life (QoL) of patients with rheumatoid arthritis (RA). (2) Objectives to evaluate the influence of acupuncture on QoL and RA disease activity, as well as to understand its mediating effect in increasing QoL associated with decreased disease activity. Methodology Cross-sectional observational analytical study with a sample of 50 patients. Data collection was performed by applying the EQ-5D-5L Scale and the DAS28 CRP. Results QoL is favorably influenced by acupuncture, with a mean value after complementary treatment with acupuncture, higher than the initial one, assuming a significance level of 0.05. Acupuncture is also a positive mediator in reducing disease activity, achieving 44% of patients in remission and no patients with high disease activity after treatment. It was observed that there is a slight constructive trend in the relationship between QoL and disease intensity in patients under complementary therapy with acupuncture (twA). Conclusion The treatment of RA with optimized QoL and reduced disease intensity is the most clinically aspired goal, which requires managing the disease and offering therapeutic suggestions capable of reaching the targets more effectively and efficiently. Acupuncture seems to play an important means when complemented to already instituted therapeutic attitudes, in order to achieve goals.

Keywords

Rheumatoid Arthritis; Acupuncture; Quality of Life

References

Technologies of Conventional Radiation and Laser for Therapy

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Abstract
In conventional radiation therapy, the type or “quality” of radiation, related to the energy of each photon (Planck, 1900), which corresponds to a certain range, is chosen according to the depth at which the tumor back end is located, regardless of its location in the human body. The amount of radiation, related to the energy transported via radiation, through the intensity of the beam, must ensure at the level of the tumor the daily energy fraction of 2 J/kg. At this dose value, the temperature of the tumor increases by about 2 x 10⁻⁴ °C. In laser therapy, the beam energy fluence should be 4 J/cm² for 4-8 minutes. The technology of the conventional therapy includes: the source of electrons, the solid target, and the braking radiation beam, in which the linac is included (X: 4 - 25 MeV and e⁻: 4 - 25 MeV). The limit of this technology is given by the electrical breaks and thermal limits in the acceleration cavities that allow acceleration gradient ≤ 50 MeV/m. Laser technology refers to the intense focused optical beams, the solid target, and the beam of electrons, protons and carbon ions, which allow an acceleration gradient of 10¹² TeV/m. The clinical requirements, TNSA and RPA methods for the generation of hadrons and the transition from radiofrequency technology to laser technology for radiotherapy are presented in this paper.

Keywords
Electron Beam; Hadron Beam; Laser Beam; Radiation Therapy; Laser Therapy

References

Biography
Prof. Dr. Scarlat Florea. Holder: Physicist engineer diploma, PhD diploma, Manager Diploma, University professor title and the Head of the Physics department at Valahia State University of Targoviste. He is Member of the New Yok Academy of Sciences, and Founding Member of the Balkan Union of Oncology (BUON) Athens. He built in Romania the first 40 MeV IFA medical Betatron (with electron beams of 10, 15, 20, and 25 MeV and the 35 MeV photon beam, EPAC96 London). He was the Scientific Director of the Institute of Physics and Nuclear Engineering, Bucharest, Magurele and Director of the Romanian-English joint venture GEC Romanian Nuclear Limited, Leicester, England. Currently, he is a Consultant Manager at the STARDOOR laboratory founded by him within the National Institute for Laser, Plasma and Radiation Physics.
**Integrative Rehabilitation and Physiotherapy**

Andrés J. Ursa Herguedas  
Integrative Medicine Institute, Valladolid, Spain

**Summary**  
There are many advances in Rehabilitative Medicine and Physiotherapy (RMP) in recent decades. Given the world events that are taking place, the RMP has to make an effort to incorporate into its practice a series of unconventional techniques / treatments, which have scientific evidence, such as Acupuncture, Neural Therapy, Osteopathy, Ozone Therapy, etc., which, applied with clinical criteria, can contribute to reducing drug iatrogenesis, lowering healthcare costs, increasing efficacy and safety, all in the context of climate change. Its implementation in health systems would contribute to reducing CO2 emissions in the health sector (HS) and work so that the HS ceases to be the fifth largest producer of greenhouse gases on the Planet.

**Subtitle**  
Integration of the knowledge and practice of physical medicine in a changing world
Intracellular Enzymes for the Treatment of Chronic Diseases

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Abstract

A remark at the outset: one should distinguish between digestive enzymes (formerly called ferments) and intracellular enzymes. The former have been in use for a long time; they include lipases, amylases, peptidases or the well-known bromelain. They work excellently in the intestine, but only partially pass into the blood and not at all into the body cells. They «crack» larger molecules and in this way «clean» the intestinal contents and to a limited extent the blood. Beneficial, of course. However, intracellular enzymes have far greater tasks; without them there is no life. The entire intermediary metabolism needs them and consists of them, i.e. energy production towards ATP (together with co enzymes) as well as protein production and the monitoring of DNA functions. Without them, the body's cells would be unable to function. At any moment, mainly as a result of oxidative and nitrosamine stress, thousands of DNA changes occur, the repair of which is the responsibility of enzymes. Fortunately they are available from an Italian company www.citozeatec.ch. We have used them on more than 1000 patients with therapy-resistant chronic diseases. We have experience of amazing success.
Traditional and Alternative Medicine in Relation to Allopathic/Conventional Medicine: A Philosophical Analysis

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Abstract
Traditional and alternative medicine (TAM) is commonly considered inferior to allopathic/conventional medicine (ACM). This presentation aims to clarify the conceptual relation between TAM and ACM in an unbiased (or at least less biased) way. Philosophical – epistemological and ethical – analysis is used, partly based on the presenter’s relevant philosophical expertise [1-2], with examples from Eastern and Western TAM, and only Evidence Based Medicine (EBM) is addressed for both TAM and ACM. The findings are that TAM can be primary or secondary or equal to ACM in effectiveness, and they can be independent or dependent on each other, such as synergistic; hence TAM can be epistemologically sound and ethically acceptable, depending on context. The conclusion is that TAM is not necessarily inferior, and may be superior, to ACM, depending on context, and more research is needed to compare and combine TAM with ACM, particularly in relation to safety.

Keywords
Allopathic; Alternative; Conventional; Medicine; Philosophy; Traditional

References

Biography
Dr. Abraham Rudnick is a psychiatrist and a philosopher who has worked across Canada as a physician leader. He is a Professor in the Departments of Psychiatry and Bioethics and the School of Occupational Therapy at Dalhousie University and the Clinical Director of the Nova Scotia Operational Stress Injury Clinic in Canada. He is a member of the Board of Directors of Research Canada and the Chair of its Taskforce on racial and indigenous justice in health research and related innovation. He is a recipient of national and international health research and development awards.
Traditional and Alternative Medicine In Epilepsy In the Middle East and North Africa (MENA)

Boulenouar Mesraoua
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Abstract
The aim of this study is to review Complementary and Alternative Medicine (CAM) treatment in epilepsy in the Middle East and North Africa (MENA) region, describe the extent and factors associated with its use among patients with epilepsy (PWE), and recommend how effectively we will be able to reduce this alarming use. The use of CAM and consultation of traditional healers for the treatment of epilepsy has so far been widespread practice for centuries in the MENA region. Lack of health professionals, non-adherence to conventional epilepsy treatment and excessive religiosity are strongly associated with the use of CAM. Improvement in the level of knowledge of epilepsy among PWE, healthcare professionals, including traditional healers, will educate PWE and their care givers on potentially unsafe practices and promote adherence to Antiseizure Drugs (ASDs). Additionally, randomized controlled trials are needed to study the role and value of various CAM treatment options in PWEs.
Cultural Impact on Acceptance of an Effective Approach for Prevention and Control of COVID-19

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2International Collaboration Center of TCM Clinical Research (Canada) – World Federation of Chinese Medicine Societies (WFCMS), 3220 Parson’s Road, Edmonton, Canada

Abstract
COVID-19 pandemic, one of the largest public health crises in the 21 century, with its rapid increasing cases and deaths has caused the overburden of the health care system, and severely impacted the economy and people’s life in Canada and worldwide.

Despite global recognition of the importance in control and isolation of the source of infection, cutting-off the route of transmission, and protection of the vulnerable population – 3-strategies for prevention and control of epidemic, implementing of these strategies may be challenged by policies, cultures, and social and economic factors at different countries and regions. Some common and effective measures, such as wearing mask and using traditional medicines, which are routine practices in China and other countries/regions in Asia, are not accepted in western countries, at least in early 2020. Protests against mask wearing and vaccination occur in the West frequently.

It is important to recognize cultural and social impact on acceptance of an effective measure for prevention and control of COVID-19. Further to reach the goal of eventual control of COVID-19 pandemic, it is essential for global collaboration to develop and implement policies, initiatives and procedures to minimize the negative impact from cultural, social, and economic factors.

Keywords
COVID-19; Prevention; Culture; Traditional Medicine; Wearing Mask; Vaccine

References
WHO. Coronavirus Disease (COVID-19) Pandemic.


Biography
Dr. Fu-Lin WANG is President of Bethune Oriental Medicine Center with 26 years of practice in Alberta, Canada. He received MD from Ningxia Medical College in 1982, Master in Public Health from Harbin Medical University in 1987, and PhD in Epidemiology from University of Calgary in 1994. He has served for many years in various organizations and committees of Complementary and Alternative Medicine (CAM) - President of the College of Acupuncturists of Alberta (CAA), Executive President of the Canadian Institute of Complementary and Alternative Medicine Research, Chief of the International Collaboration Center of TCM Clinical Research in Canada - the World Federation of
Chinese Medicine Society (WFCMS), just name a few. He organized and co-chaired the International Conference of Traditional Medicines on Health and Wellness held in Vancouver (2017, 2018, 2019, 2020), which is well received with large impact on TCM profession and the society at large.
Modern Science: Demonstrating Fundamental Principles of Traditional Chinese Acupuncture

Thomas Burgoon
American Academy of Medical Acupuncture, USA

Abstract
The focus of this talk is three bodies of recent research on the effects of acupuncture on inflammation, gastrointestinal, and cardiovascular systems that have made an outstanding contribution to our modern understanding of acupuncture. These detailed and comprehensive research efforts have utilized a complement of sophisticated techniques including immunohistochemistry, modern techniques of stimulation and recording of somatic, central nervous system and autonomic pathways, along with an array of modern surgical and neurosurgical techniques. These studies confirm some of the most important and profound principles of traditional acupuncture theory and practice and they provide an important foundation of communication with our non-acupuncture medical colleagues about the practice and benefits of acupuncture.

Biography
Thomas Burgoon, MD is a past president of the American Academy of Medical Acupuncture (AAMA). He is a member of the Board of Directors of ICMART (International Council on Medical Acupuncture and Related Techniques), Associate Editor-in Chief of the World Journal of Acupuncture and Moxibustion, member of editorial board of Medical Acupuncture, chairperson of the Institutional Review Board of the New York College of Traditional Chinese Medicine, and advisor on acupuncture for Unite for Her. He graduated from medical school at Vanderbilt University in 1985 and completed residency training in internal medicine. He began studying acupuncture theory and practice in 1992 and studied with Anita Cignolini of Milan, Italy for 11 years and four years with the New York College of Traditional Chinese Medicine (NYCTCM). He is interested in traditional Chinese medical theory and practice and also in the fostering of meaningful dialog with our colleagues in regular medicine about acupuncture's value in modern medical practice.
The Universal Pick-Up Resonance, Real or Imaginary?

Chiyu Hu
California State University, USA

Abstract
The problem arises from the Faddeev-Merkuriev Differential Equations (MFE). In the presence of Stark-effect, the pick-up resonances were created in multi-channel scattering calculation. This note will outline the power of variational principle where the variational parameters are built in as part of the Faddeev-Merkuriev Differential Equations.
Oxidative Stress Markers Predict the Onset Of Diabetes Mellitus - A Bridge to Preemptive Medicine

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Abstract
As the IDF warns, diabetes mellitus (DM) is becoming a global issue. In Japan, the number of chronic dialysis patients continues to increase every year, and it has reached 344,640 at the end of 2019 and the prevalence ratio of dialysis patients was 2,732 per million population. Diabetic nephropathy was the most common primary disease of the prevalent dialysis patients of 39.1%. Therefore, the prediction and prevention of the onset of DM as primary prevention is more important than the treatment for the prevention of its severity as third prevention. In this talk, I will report the results of longitudinal study whether if oxidative stress markers may predict the onset of lifestyle-related diseases, especially DM.

Based on the results of baseline oxidative stress markers in cohort of 2,656 (1,704 men aged 59.5±10.4 y/o and 952 women aged 59.1±10.2 y/o) subjects who underwent oxidative stress marker tests during comprehensive health check-up, “Ningen Dock” at the health screening center, Mitsui Memorial Hospital in 2015 and 2020, we calculated odds ratios for development of lifestyle-related diseases within 5 years using logistic regression analysis. The oxidative stress level was assessed by diacron reactive oxygen metabolites (d-ROMs) test and the antioxidant potential was by biological antioxidant potential (BAP) test, respectively. Both the oxidative stress level and antioxidant properties in serum were determined by an automated method.

In 2020, 859 (562 males aged 60.6±9.6 and 297 females aged 60.6±8.9) subjects were newly developed lifestyle-related diseases. Obesity was developed in 64 (9.0%) among 700 subjects, hypertension was in 81 (14.8%) among 547 subjects, diabetes was in 70 (9.0%) among 779 subjects, dyslipidemia was in 94 (23.7%) among 397 subjects, hyperuricemia was in 54 (8.0%) among 671 subjects, CKD was in 87 (11.8%) among 739 subjects, respectively. The significant odds ratios for obesity were body mass index (BMI), fasting plasma glucose (FPG) and HbA1c, its ratios for hypertension were BMI, systolic blood pressure (BP) and diastolic BP, its ratios for DM were FPG of 6.38 (3.67-11.69, p<0.001), HbA1c of 7.46 (4.27-13.05, p<0.001), glycated albumin of 3.26 (1.85-6.46, p<0.001) and c-reactive protein (CRP) of 2.38 (1.10-5.15, p<0.05), its ratio for dyslipidemia was CRP, and its ratios for hyperuricemia were BMI, HDL-C and estimated GFR. The odds ratios of d-ROMs were 1.66 (0.90-3.08) and BAP was 1.46 (0.83-2.57) for obesity. Also, they were 1.06 (0.57-1.96) and 1.01 (0.59-1.73) for hypertension, 3.62 (2.12-6.17, p<0.001) and 2.20 (1.32-3.68，p<0.005) for diabetes mellitus, 1.43 (0.82-2.49) and 1.19 (0.70-2.05) for dyslipidemia, 1.13 (0.54-2.39) and 1.53 (0.83-2.81) for hyperuricemia, and 1.23 (0.71-2.14) and 1.11 (0.66-1.87) for CKD, respectively. The odds ratios of d-ROMs and BAP tests for diabetes mellitus were only significant.

Our findings showed that oxidative stress markers such as d-ROMs and BAP tests predict the onset of DM. This results also suggest that lifestyle modification against oxidative stress may prevent the onset of DM. D-ROMs and BAP tests could be a bridge to preemptive medicine for lifestyle-related diseases.
Premature ovarian Insufficiency

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Abstract
Premature ovarian insufficiency (POI) - Loss of ovarian function occurring in women younger than 40 years, is called (POI). Fuller Albright, a Harvard endocrinologist, first described the condition. POI causes significant short-term and long-term morbidity related to estrogen deficiency. The condition is managed by providing exogenous estrogen replacement, usually as the oral contraceptive pill or hormone therapy. These preparations have different estrogen formulations and may have differing benefits and risks. In addition to causing infertility, POI is associated with multiple health risks, with bothersome menopausal symptoms, decreased bone density and increased risk of fractures, early progression of cardiovascular disease, psychologic impact that may include depression, anxiety, and decreased perceived psychosocial support, potential early decline in cognition, and dry eye syndrome. Premature ovarian insufficiency (POI) results in both estrogen and testosterone insufficiency associated with diminished sexuality. But presently, the only evidence-based indication for testosterone therapy for women is for the treatment of postmenopausal women with low sexual desire with associated personal distress. Continuing HRT until the normal age of natural menopause, 50 years is recommended. Discussion of possible ovarian conservation in women who are premenopausal is an integral part of the preoperative planning for any women undergoing hysterectomy. Timely and effective HRT for women who will experience surgical primary ovarian insufficiency is clearly indicated. We address special populations of women with POI, including women with Team approach with Multi-professional collaboration is the key. There are new horizone of treatment of subfertility. Registry of POI should be maintained. On-going psychological support is very important for POI women.

Keywords
Premature Ovarian Insufficiency; Bone Health; Cardiovascular Health; Hormone Therapy; Reproductive Health
Efficacy of Ezio Foot Massage Intervention to Reduce the Impact of Chemotherapy Adverse Effects among Children with Hematological and Solid Tumors

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Dr. K. Pavithran,
MD, DM, FRCP, Professor & HOD of Oncology department, AIMS, Amrita University, Kochi, Kerala, India

Abstract

Introduction

Foot Massage (CAM) has been practiced for thousands of years in different parts of the world, including Egypt, India, and China.

Objectives

1. Identify the level of nausea, vomiting, insomnia, fatigue among the control and experimental group children before chemotherapy administration. Objectives 2, 3, 4, 5 are to assess the efficacy of EFM in reducing the CINV, Insomnia, and CRF among children with hematological and solid tumors respectively.

Materials & Methods

The tool consists of 3 sections. I Demographic profile, II Clinical profile, III Modified (NCICTC) version 3.0 was used to explore the AE of chemotherapy and its severity from grade 0, 1, 2, 3, 4 to grade 5. Sampling technique adopted for this study cluster randomization, the size of 140 children the first 70 were selected for the control group and the next 70 were allotted for the experimental group. The Factorial research design was used \([2 \times 4 \times 10 (2 \times 5)]\) with repeated measures for the last variable. In the study, totally 3 variables were manipulated such as group, drug, and time of assessment. The numbers in the factorial design indicate the following: 2 refers to independent variable “Group” which consists of two levels (Experimental and control groups). 4 refers to the other independent variable “Drug” with four levels (four drugs – Drug 1 Carboplatin, Drug 2 Cyclophosphamide (moderate risk), Drug 3 Cisplatin, Drug 4 Cyclophosphamide (high risk)), 10 refers to the dependent variable “Assessment” (10 chemotherapy AE assessment for nausea, vomiting, insomnia and fatigue) Since EFM has been repeated 3 times in a day for 5 days, the variable “assessment” is called as repeated measure, which consists of 10 levels (2 assessments / day with the total of 10 assessments).

Results

The non-significant PCL- AE assessment between the control and experimental groups shows that both groups were more or less similar and comparable. The significant ‘P’ value of the highest order of interaction effect between Assessment, Drug and Group confirms that children in the experimental group who received EFM the AE of nausea (P=0.016), vomiting (P=0.001), Insomnia (P=0.000) and Fatigue(P=0.000). Conclusion The EFM, significantly, reduces the chemotherapy AE such as nausea, vomiting, insomnia and fatigue.

Keywords

AE- Adverse Effects CAM- Complementary and Alternative Medicine/CINV- Chemotherapy Induced Nausea and Vomiting; CRF- Cancer Related Fatigue; NCICTC-National Institute Common Toxicity Criteria Version 3.0; EFM- Ezio Foot Massage
In vitro and In vivo Effects of Traditional Chinese Medicine Formula T33 in Human Breast Cancer Cells

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Abstract

Background
Breast cancer is the leading cause of cancer-related death in women worldwide. Although traditional Chinese medicine (TCM) is commonly used by patients with breast cancer, little is known about TCM prescriptions for breast cancer. This study investigated the effects of a new TCM formula, T33, comprising Radix Kansui, Rheumrhabarbarum, Paeonialactiflora, Jiangbanxia, and Zhigancao on breast cancer cells in vitro and in vivo.

Methods
To evaluate the effects of T33 on human breast cancer, HMEpiC, MDA-MB231 and MCF-7 cells were treated with different concentrations of T33 and then analyzed using MTT and Transwell migration assays. To elucidate the involvement of autophagy in the T33-induced death of MDA-MB231 and MCF-7 cells, immunofluorescence staining with LC3-II-specific antibodies was performed. Tumor xenografts were generated by subcutaneously injecting either MDA-MB231 or MCF-7 cells into BALB/c nude mice to determine the effects of T33 on these cell lines in vivo.

Results
The experimental results revealed that 0.1 mg/mL, 0.5 mg/mL, 2.5 mg/mL, 5 mg/mL and 10 mg/mL T33 significantly inhibited the proliferation and invasion of MDA-MB231 and MCF-7 cells. Moreover, significant autophagy was observed in MDA-MB231 and MCF-7 cells in the presence of 2.5 mg/mL, 5 mg/mL and 10 mg/mL T33. An animal study further revealed that both low (200 mg/kg) and high (600 mg/kg) doses of T33 inhibited the proliferation of xeno grafted breast cancer cells in BALB/c nude mice.

Conclusion
These findings demonstrate for the first time that T33 has potential in the treatment of breast cancer owing to its antiproliferative effects and induction of autophagy.

Keywords
Breast Cancer; Traditional Chinese Medicine (TCM); MDA-MB231; MCF-7; Autophagy

References
Biography
Clinical TCM doctor of De-Yi Chinese Medical clinic and PhD student of Institute of Medicine, Chung Shan Medical University, Taichung, Taiwan
A Natural Remedy to an Age-Long Ailment: Inflammatory Bowel Disease

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Abstract
Inflammatory bowel disease (IBD) is a chronic and persistent inflammatory disease of the gastrointestinal tract. Immune responses of the host and genetic predisposition along with other environmental factors act as key regulators in its pathology. Although multiple treatment options are available, yet there is no convincing cure for IBD. Biological therapies and chemical drugs suffered from inevitable side effects. Condurango (Gonolobus condurango), widely used in various systems of complementary and alternative medicines including homeopathy, alleviates stomach and esophageal ailments. It is also found to be helpful in certain types of cancer reducing tumor volume. In silico studies have also enlightened the repurposing of Cefadroxil, a semisynthetic antibacterial cephalosporin, against IBD. In order to investigate the efficacy of these formulations, a study was designed where 3% Dextran sodium sulphate (DSS) was administered for 7 days to C57BL/6 female mice in drinking water with or without 200 mg/kg/day cefadroxil or 0.06 ml/mouse/day Condurango for the last four days. The normal group was provided with plain drinking water throughout the tenure. Post sacrifice, blood parameters were evaluated followed by ELISA, DPPH assay, and myeloperoxidase assay. Treatment with Condurango or cefadroxil, both improved the disease pathology as was evident from the blood parameters. Hemoglobin levels indicate reduction in blood loss and also there was a check in catabolism of albumin. The shoot-up in inflammatory marker C-reactive protein and pro-inflammatory genes like IFN-γ were also reduced on treatment significantly. A prominent antioxidant activity of Condurango was noticed which was supported by the myeloperoxidase activity. Hence, all the data indicating anti-inflammatory, anti-oxidant potential of Condurango and cefadroxil emphasize their use in the treatment of IBD.

Keywords
Condurango; IBD; Disease Activity Index; Anti-Inflammatory; Antioxidant

Biography
Dr. Ravichandiran Velayutham has 26 years Professional and research experience in field of Pharmacy, Drug discovery, and Natural products. Under his leadership, NIPER Kolkata has started synthetic biology program to produce pharmaceutically important small molecules in engineered yeast acting as cell factory. He has made a team with experienced scientists who are pursuing the synthetic biology program at NIPER Kolkata. CRISPR Cas system has been introduced successfully targeted edit yeast genome. He has a good team of scientists and scholars working in the area of Pharmacology, Natural products, Medicinal Chemistry, Drug design and Pharmacaco informatics. His focus areas of research include establishing of scientific evidence for the therapeutic effects of traditional medicine systems such as Ayurveda and Homoeopathy. He is a member of Scientific Advisory Board in Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India.
Efficacy and Safety of Laser Acupuncture for Knee Osteoarthritis: A Systematic Review and Meta-Analysis

Rong HAN¹, and Jinlian HU*
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Abstract

Objective
To conduct a meta-analysis to determine the efficacy and safety of laser acupuncture (LA) in the treatment of osteoarthritis (OA).

Methods
Studies on the efficacy and/or safety of laser acupuncture in the treatment of OA were searched in electronic databases. Data was gathered from the start of each database until 2022. (up to March). The major outcomes of interest were the “WOMAC total score,” “WOMAC pain score,” “WOMAC stiffness score,” “WOMAC physical function score,” and “VAS score.” For random-effects analysis, the Der Simonian-Laird approach was utilized.

Results
We included 25 randomized controlled clinical trials that satisfied our criteria (2075 patients). The LA vs. Sham comparisons are of particular importance. LA (efficacy), LA vs. A (comparative effectiveness), LA paired with A vs. A (effectiveness as an adjunct), and any other studies that included LA in their treatment. Knee OA patients benefit from laser irradiation. LA is also effective and produces similar results as laser irradiation. In most trials, LA can produce nearly the same impact as manual acupuncture, and in some cases, it can even outperform acupuncture.

Conclusion
The results demonstrated that laser acupuncture is more or less beneficial in patients with OA, with superior efficacy reached when laser parameters (810nm, 785nm) are used on the LA vs. Sham LA group. Unfavorable findings have been reported in several trials, probably due to unstaged illness analysis, improper acupoint selection, lack of remote combined acupoint application, or unrealistic laser parameters. Furthermore, our findings imply that combining acupoints is more effective, which is consistent with traditional Chinese medicine’s use of combined acupoints.

Keywords
Laser Acupuncture; Osteoarthritis; Efficacy; Safety; Meta-Analysis

References


Soilless Cultivation of Medicinal Plants - A Sustainable Production System for Quality Raw Materials in Herbal Industry

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Abstract
Present-day medical practitioners are more and more looking towards alternative medicines due to their nontoxic nature i.e., zero side effects and low cost. It has already been established that the phyto based industry is a booming business sector worldwide for making pharmaceuticals, nutraceuticals and cosmetics. Again, the industry faces significant financial losses as a result of the use of low-quality source materials and unsustainable agro management. Soil degradation, less availability of cultivable water coupled with biomagnifications of harmful industrial chemicals, heavy metals, and pesticides in conventional agro practice have been identified as major challenges for the continuous supply of quality raw materials. Overexploitation of medicinal plants in high demand has further depleted the natural population; simultaneous difficulties in conventional open-field agriculture push the scientific community to search for an alternative, sustainable, and low-cost strategy for the continuous supply of raw materials to the industry without hampering natural habitat. In this context soilless agricultural practice shows hope for the future and it can emerge as one of the most sustainable agricultural practices for pollution-free production of therapeutic herbs. This presentation would offer comprehensive fast-hand information for prospects of using various types of soilless techniques used in medicinal plant cultivation which would benefit the herbal industry through helping medicinal plant growers.
Combination of Therapeutic Thai Massage with Tok Sen in Patient with Office Syndrome: Clinical Experience

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Abstract

Introduction
Chronic stiffness and pain at the neck, shoulder, upper back, and referred pain through the arm are the most common problems among people who suffered from office syndrome.

Clinical Problems
Limited shoulder movement, muscle tightness, local and referred pains to the upper back, neck, and arm were presented, as same as a numbness sensation along the elbow, arm, and fingers.

Assessment
Range of motion of the shoulder, neck, and back were clinically evaluated as same as the muscle tightness, numbness sensation, local and referred pain were evaluated before and after treatment.

Treatment
Combined treatment by therapeutic Thai massage on signal points and energy lines, deep friction, and stretching techniques on the muscles of the neck, shoulder, arm, elbow, forearm, and hand, with Tok Sen technique for 3-5 cycles per region at prone, supine, side-lying and sitting positions were performed.

Additional Treatment
Shoulder joint mobilization techniques with glenohumeral guiding and scapular movement had to be implemented during Therapeutic massage and Tok Sen.

Result
After 30-60 min of treatment at the first visit along with the muscles of the neck, shoulder, around the scapular, forearm, and hand showed quick responses on the range of motion, muscle flexibility, and no pain sensation.

Conclusion
From the clinical experience, Thai massage and Tok Sen can be applied to people who are suffering from office syndrome and shows very quickly impressive responses in the clinic.
Keywords
Therapeutic Thai Massage; Tok Sen; Office syndrome

References

Biography
Associate professor of Physical Therapy at the Faculty of Associated Medical Sciences, Chiang Mai University. His academic background is the Bachelor’s degree in Physical Therapy in 1999, Master and Doctor degrees (Biochemistry). He specializes in rehabilitation, exercise, and clinical treatment. Published more than 40 international and 10 national articles and four reviewed chapters in the international textbooks. Updated training on the Thai Traditional Medicine Assistant Course, Therapeutic Thai massage, and special training as Tok Sen, have been applied during Physical Therapy in Clinic. Moreover, to be a research consultant on Tok Sen for relaxation for Spa therapists at the Faculty of Nursing, Chiang Mai University, Thailand.
Associations between Adolescents’ Empathy and Prosocial Attributes Before and During the COVID-19 Pandemic

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Abstract
Adolescence is a formative period of social development. Considerable changes have been enforced in adolescents’ lives due to the COVID-19 pandemic. Fewer published literature, especially literature with a longitudinal design, was found focusing on the longitudinal associations between adolescents’ prosocial attributes and empathy. We conducted a longitudinal study to examine the effects of the COVID-19 pandemic on prosocial attributes and empathy, as well as their longitudinal bilateral relationships. A total of 2,510 adolescents completed the whole study. Data were collected in December 2019 (Wave 1, before the outbreak of the pandemic) and July 2020 (Wave 2, during the pandemic) in Chengdu, Sichuan, China. Prosocial attributes and empathy were measured by XXX and XXX at both waves, respectively. Both empathy and prosocial attributes decreased significantly from 49.89 (9.12) and 49.89 (8.80) before to 48.29 (8.72) and 49.39 (9.26) during the pandemic (p < 0.001). A higher level of empathy at Wave 1 significantly predicted higher prosocial attributes at Wave 2 (β = 0.173, SE = 0.021, t = 8.430, p < 0.001). On the other hand, lower prosocial attributes score significantly predicted a lower empathy score from wave 1 to wave 2 as well (β = 0.100, SE = 0.021, t = 4.884, p < 0.001). Detrimental effects of the COVID-19 pandemic were found on adolescents’ empathy and prosocial attributes. Special attention should be paid to prosocial attributes and empathy of adolescents under any social crisis such as the COVID-19 pandemic, considering its importance for adolescents’ physical, mental and social development of adolescents.

Keywords
Adolescents; Empathy; Prosocial Attributes; Longitudinal Study

Biography
Xueqian Yang is a 2nd year master student from West China School of Nursing/ West China Second University Hospital. Her research has included adolescents mental health, free position delivery.
Synthesis of Graphene Oxide / PEG/ Grape Seed Nanocomposite Material And Development Of Temperature/Ph Sensitive Drug Release Technique.

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Graphene, a unique material, has made far-reaching developments in many different fields such as materials science, electronics, condensed physics, quantum physics, energy systems, etc. Since its discovery in 2004, extensive studies have been completed for clarifying its physical and chemical properties. Because of its unique characteristics, it has become a potential candidate for nanomedicine researchers for discover its usage in biomedical applications. In the last decade, remarkable efforts have been devoted to investigating the biomedical utilization of graphene and graphene-based materials, particularly in smart drug and gene delivery such as cancer therapy. And also by unique design, multifunctional nanosystems designed based on nanocomposite of GO/PEG/ and grape seed, which are endowed with promising thermal/pH-dependent drug/gene delivery abilities for MCF7 breast cancer and MCF12A human breast cells therapy. SEM showed no phase separation of the polymers, whereas AFM showed a decrease in surface roughness with an increase in GO content. 100 µL of grape seed was the critical concentration at which the sample displayed excellent swelling and preserved its structure. Nanocomposite results showed good swelling. This could be further augmented by additional advantages offered by functionalized rGO with grape seed and PEG, such as high biocompatibility, targeted delivery, and enhanced thermal effects. The GO/PEG/ extraction of grape seed nanocomposite showed better antibacterial and cell viability behaviors on MCF7 and MCF12A cells. They can be better biomaterials in biomedical applications. According to this application of functionalized GO in different cancer treatment modalities such as chemotherapy, photothermal therapy and/or photodynamic therapy, gene therapy, chemotherapy/phototherapy, and photothermal/immunotherapy. Also, increasing efficiency of the grape seed extract and directing it to the target.

Keywords
Drug release; PEG; GO; grape seed ; pH sensitivity, thermo responsivity
Title: Eritrean Traditional Medicine: Its Overview and Spotlight on Traditional Medicine Unit/Department

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Abstract
Traditional Medicine (TM) has been practiced in Eritrea as an important part of the culture and tradition of its people for centuries (1). Eritrean Traditional Medicine (ETM) currently comprises of more than 19 modalities of practice that fall into three major categories; namely herbal, spiritual, and procedure-based practices. Reportedly, there were more than 3,900 Traditional Health Practitioners (THPs) in the country (2). Despite the availability of a subsidized health care system in Eritrea, TM use remains widespread (3-5). In 2012 the Ministry of Health established Traditional Medicine Unit (TMU), under the umbrella of National Medicines and Food Administration, in order to ensure public health safety whilst harnessing the potential contribution of TM. As part of its commitments, the ministry ratified national TM policy in 2017 with a vision of creating a health care system where both the conventional and traditional systems are joined together to provide access to healthcare and thus, promote Universal Health Coverage (UHC) (1). Some of the major achievements of the unit include, but not limited to: establishment of Traditional Medicine Advisory Committee, documentation & research on TM practice, products and practitioners, Training programs to Healthcare professionals, THPs & health science students, safety monitoring of TM/ herbal products and collaborative linkage (6).

This presentation is aimed at introducing the ETM and TMU, unit in charge of, as well.

Keywords
Eritrean Traditional Medicine (ETM), Safety, Traditional Medicine Unit (TMU) & Universal Health Coverage (UHC).

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Biography
Liya Abraham Kidane, B.Pharm, is a Pharmacist currently working at the Traditional Medicine Unit (TMU) of the Eritrean National Medicines and Food Administration (NMFA). She is an enthusiast for alternative ways of healing and has been involved in providing training to healthcare professionals and health science students on safety monitoring of traditional/herbal products, mentoring pharmacy
students on Traditional and Alternative Medicine (T&AM) related researches, reviewing T&AM related books etc. She has been participated and presented in national and international scientific seminars, meetings, trainings etc, representing Eritrea. Ms. Liya Abraham leadership includes member Eritrean Product Evaluation and Registration Committee (PERC), Eritrean Pharmacists Association (EriPa), and is a former Zonal Medical Store officer at Assab Zonal Medical Store, Southern Red-Sea Zone involved in providing training to healthcare professionals, medication invoice preparation and dispatch.
Skin Perforators as Acupoints for Needle Therapy

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Abstract

Objective
To investigate the position association between skin perforators and acupoints, as well as the effect of needle therapy on perforators.

Methods
To determine the distance between skin perforators and acupoints (P-A), three different approaches were employed and then perforator needle therapy was applied to test analgesia effect: i). A random chosen of a skin flap area, acupoints were determined by TCM physicians, then nearby skin perforators were identified by Doppler; ii). A random chosen of acupoint regions, skin perforators were detected by Doppler, and acupoints were located through 5 TCM physicians. Non-developing ink was used for blind marking. All markings were transferred to a paper film for further P-A distance measurement; iii). Needles were inserted in skin perforators. Color Doppler Ultrasound was used to locate needle tips under skin surface. The distance of needle tips and perforators was measured; iv). A random selection of 45 patients with different degrees of postoperative pain symptoms. A cutaneous perforator was located by Doppler and performing needle therapy on it with a filiform needle for 30 minutes. The NRS scale was used to evaluate the degree of pain before and after needle therapy. All data were analyzed using paired T-test or Wilcoxon signed rank test, and further subgroup analysis based on time was performed.

Results
Showed that P-A distance was less than 1 cm in selected areas, indicating a highly position correlation. There was a significant analgesia effect of perforators needle therapy for patients with postoperative pain (P < 0.05). Subgroup analysis based on time showed significant analgesia effect at 6h, 12h, 24h, and 48h after operation (P < 0.05).

Conclusion
The locations of perforators and acupoints are highly correlated and perforator needle therapy has a significant analgesic effect.

Keywords
Skin Perforators; Acupoints; Post Operational Pain; Traditional Chinese Medicine; Needle Therapy