Guest Editorial

Introduction to the special section on complimentary medicine for work, function and health

Valerie J. Berg Rice*

US Army Research Laboratory (Emeritus), Aberdeen Proving Ground, MD, USA

This special section of *WORK* focuses on complementary and alternative medicine (CAM) and is comprised of practices, products and processes that are thought to impact health, but are not considered to be part of conventional medicine [1]. The term *alternative* applies when the method used replaces a traditional medical procedure or intervention, while the term *complimentary* is used when the method is implemented along with traditional medicine [1].

Two general categories have been applied to CAMs. One is *natural products* such as the use of herbs and other plants for medicinal purposes. Genc and Balut [2] address this as they explore the attitudes toward, and engagement in, CAM by cancer patients in Turkey. By examining "what currently exists" and the present use of CAM, traditional medical oncology approaches can anticipate their patients' potential use and selection of CAMs during their care. As you will witness in reading this article, nearly three quarters of cancer patients in Turkey elect to use CAM, particularly phytotherapy [2]. Phytotherapy is also known as herbalism, the use of plants as medication. The article also describes the characteristics of individuals who seek CAMs, so medical professionals may anticipate and talk with cancer patients who may be

open to complimentary care about the pros and cons of such use.

The second major category applied to CAMs are body/mind practices [1]. These practices tend to have training programs, trained teachers and practitioners, and are often build upon cultural, indigenous, regional, or religious practices observed to impact health and wellness. Body/mind practices include, but are not limited to, acupuncture, aroma therapy, biofeedback, chiropractic, energy medicine, guided imagery, healing touch, massage, meditation, movement therapies, music, osteopathic manipulation, relaxation techniques, spiritual practices, tai chi, qi gong, and yoga. Other complementary health approaches include ayurvedic medicine, homeopathy, naturopathy, traditional healers, and traditional Chinese medicine. Five articles address body/mind practices for client care.

The first article in the body/mind practice for client care examines a 14-item Active Movement Scale (AMS) for use with adults experiencing musculoskeletal disorders, with a particular focus on client function [3]. Such an assessment may assist physical and occupational therapists, athletic trainers, physiatrists, and rehabilitation centers in determining whether additional physical training is needed as a client leaves medical care and transitions to home and the use of gyms, sports clubs, home exercise programs, and often - to complementary therapies. For example, participating in an energy medicine

^{*}Address for correspondence: Valerie J. Berg Rice, US Army Research Laboratory (Emeritus), Aberdeen Proving Ground, MD, USA. E-mails: valerie@vitalifecenter.com and genergo@gmail.com.

exercise program, tai chi, qi gong or yoga post physical rehabilitation may increase the likelihood future functional performance.

Moving to a healthy population, Gülsah and Suner-Kekik [4] present an innovative upper-extremity telerehabilitation exercise program with walking advice for office workers who were telecommuting. After completing a one-week intervention program, participants reported decreased pain, increased physical activity, and improved self-reported mood and quality-of-life. Such a complementary approach is important for retaining strong, committed workers and may be useful for aging populations as well. Importantly, they measured both physical and emotional well-being.

While office workers who are telecommuting may have less access to work-related wellness and fitness programs, college students can have access to such programs, yet choose to focus their time and energy on academics, while neglecting their physical fitness. A history of low levels of physical activity and high sedentary behavior predict those same behaviors in the future [5] and sedentary behavior is associated with detrimental health consequences [6]. Thus, Mitra and colleagues [7] examined yoga as a complementary intervention with female college students, finding physical fitness improvements after participation in a three-month yoga program.

The next two articles investigate the complementary practice of mindfulness meditation. The first article compares a brief, self-administered mindfulness meditation (MM) practice with an equally brief exercise program based on Eden Energy Medicine (EEM) [8]. Both MM and EEM use Eastern and Western techniques to impact health, and the article evaluates the influence of the interventions on affect and vitality. While both interventions improved vitality and positive affect, only the EEM exercise intervention decreased negative affect, emphasizing potentially different outcomes for the two interventions [8]. The second article concentrates on the study of real-time Mindfulness-based Stress Reduction (MBSR, meditation) offered in-person and in a virtual world, along with those participating in a wait-list control group. Participants were U.S. military service members and veterans and the objective was to determine the influence of each group on self-compassion [9]. Positive self-compassion aids ones' ability to cope with negative experiences and situations without self-blame, thus leading to confident, constructive action (rather than inaction) (Ibid) and greater distress tolerance [10]. Both

in-person and virtual world interventions increased self-compassion, while no increase was seen in the control group [9], demonstrating alternate delivery methods that effect personal coping.

The final article in this special section on complementary medicine and health care spotlights the importance of two types of social support for health care professionals, in this case for nurses. Perceived social support is associated with lower compassion fatigue and higher job satisfaction [11]. Yet, there could be differences between perceived and received social support. Nazari, Zamani and Afshar [12] examined the relationships between perceived and received social support on methods of coping. Both were related to coping in terms of seeking support and cognitive reappraisal, while only received social support was associated with accepting responsibility. This adds to the body of knowledge regarding the benefits of social support by including both perceived and received applications.

I hope you enjoy these articles. They demonstrate CAM use:

- as shown in archival data to be used for planning and prevention;
- as a functional assessment tool used for patient placement after treatment, into continued patient fitness programs;
- as interventions to improve physical and emotional health;
- for the benefit and healthiness of health care providers.

The use of CAM has grown significantly in the U.S. and other countries in recent decades [13]. With its' use comes evidence-based research as CAM practitioners recognize the importance of rigorous studies. Most new professions begin with case studies, followed by examining the effectiveness of CAM alone and CAM combined with traditional health care, and research designs that examine and compare groups (CAM, a control group, and a placebo). While research on CAM continues to develop, the present articles help to move the wheels of time forward by examining the effectiveness of both ancient and contemporary complimentary techniques on the health and well-being of individuals and groups.

Conflict of interest

None to report.

References

- Collection Development Guidelines of the National Library of Medicine [Internet]. Bethesda (MD): National Library of Medicine (US); 2019. Complementary and Alternative Medicine. [Updated 2018 Mar 26]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK518811//#
- [2] Genc E, Balut I. Investigation of usage, attitudes toward complementary and alternative medicine among cancer patients in Turkey during COVID-19 pandemic. WORK. 2024;78(4):1161-72.
- [3] Wickstrom RJ, Wang I. Reliability and concurrent validity of the Active Movement Scale (AMS) in adults with musculoskeletal disorders. WORK. 2024;78(4):1173-86.
- [4] Gülsah B, Suner-Kekik S. Effects of short-term upper extremity exercise training in office workers during COVID-19 restrictions: A randomized controlled trial. WORK. 2024;78(4):1187-99.
- [5] Ter Hoeve N, Ekblom M, Galanti MR, Forsell Y, Nooijen CFJ. Unfavourable sedentary and physical activity behaviour before and after retirement: A populationbased cohort study. BMJ Open. 2020;10(7):e037659. doi: 10.1136/bmjopen-2020-037659. PMID: 32723744; PMCID: PMC7389486.
- [6] Marconcin P, Zymbal VR, Gouveia É, Jones B, Marques A. Sedentary behaviour: Definition, determinants, impacts on health, and current recommendations. IntechOpen. 2021; doi: 10.5772/intechopen.100250. Available from: https://www.intechopen.com/chapters/78658

- [7] Mitra S, Mitra M, Nandi P, Saha M, Nandi DK. Yogistic efficacy on cardiopulmonary capacities, endurance efficiencies and musculoskeletal potentialities in female college students. WORK. 2024;78(4):1201-12.
- [8] Devoy R, Maguire R. Effects of mindfulness and movement on affect and vitality. WORK. 2024;78(4):1213-23.
- [9] Rice VJB, Schroeder P, Allison SC. Effects of mindfulness meditation training offered in-person and via a virtual world on self-compassion: A study with U.S. military active duty and veterans. WORK. 2024;78(4):1225-45.
- [10] Shaw JL, Kelly AC. How exposure to personal distress with and without self-compassion affects distress tolerance: Results from a two-sample randomized trial. Mindfulness. 2024;15:570-585. https://doi.org/10.1007/s12671-024-02312-x
- [11] Pergol-Metko P, Staniszewska A, Metko S, Sienkiewicz Z, Czyzewski L. Compassion fatigue and perceived social support among polish nurses. Healthcare. 2023;11(5):706. https://doi.org/10.3390/healthcare11050706
- [12] Nazari S, Zamani A, Afshar PF. The relationship between received and perceived social support with ways of coping in nurses. WORK. 2024;78(4):1247-55.
- [13] Mortada EM. Evidence-based complementary and alternative medicine in current medical practice. Cureus. 2024;16(1):e52041. doi: 10.7759/cureus.52041.