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## **R E A D I N G S**

A SELECTION OF TEN CURRENT READINGS ON TOPICS RELATED TO  
SELF-CARE TECHNIQUES

## A SELECTION OF TEN CURRENT READINGS ON TOPICS RELATED TO SELF-CARE TECHNIQUES

Selection of readings made by A/Prof Goh Lee Gan

### READING 1. MENTAL AND PHYSICAL (MAP) TRAINING ENHANCES HEALTH AND WELLNESS

**Shors TJ, Olson RL, Bates ME, Selby EA, Alderman BL. Mental and Physical (MAP) Training: a neurogenesis-inspired intervention that enhances health in humans. *Neurobiol Learn Mem.* 2014 Nov;115:3-9. doi: 10.1016/j.nlm.2014.08.012. Epub 2014 Sep 9. Review. PubMed PMID: 25219804; PubMed Central PMCID: PMC4535923**

URL: <http://www.sciencedirect.com/science/article/pii/S1074742714001580> (payment required)

Shors TJ,<sup>1</sup> Olson RL,<sup>2</sup> Bates ME,<sup>3</sup> Selby EA,<sup>4</sup> Alderman BL.<sup>2</sup>

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#### ABSTRACT

New neurons are generated in the hippocampus each day and their survival is greatly enhanced through effortful learning (Shors, 2014). The numbers of cells produced can be increased by physical exercise (van Praag, Kempermann, & Gage, 1999). These findings inspired us to develop a clinical intervention for humans known as Mental and Physical Training, or MAP Training. Each session consists of 30min of mental training with focused attention meditation (20min sitting and 10min walking). Meditation is an effortful training practice that involves learning about the transient nature of thoughts and thought patterns, and acquiring skills to recognize them without necessarily attaching meaning and/or emotions to them. The mental training component is followed by physical training with 30min of aerobic exercise performed at moderate intensity. During this component, participants learn choreographed dance routines while engaging in aerobic exercise. In a pilot "proof-of-concept" study, we provided supervised MAP Training (2 sessions per week for 8 weeks) to a group of young mothers in the local community who were recently homeless, most of them having previously suffered from physical and sexual abuse, addiction, and depression. Preliminary data suggest that MAP Training improves dependent measures of aerobic fitness (as assessed by maximal rate of oxygen consumed) while decreasing symptoms of depression and anxiety. Similar changes were not observed in a group of recently homeless women who did not participate in MAP Training. It is not currently possible to determine whether new neurons in the human brain increase in number as a result of MAP Training. Rather these preliminary results of MAP Training illustrate how neuroscientific research can be translated into novel clinical interventions that benefit human health and wellness.

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## READING 2. FOCUSED ATTENTION AND RECEPTIVE ATTENTION DECREASE RUMINATIVE PROCESSES

**Wolkin JR.** Cultivating multiple aspects of attention through mindfulness meditation accounts for psychological well-being through decreased rumination. *Psychol Res Behav Manag.* 2015 Jun 29;8:171-80. doi: 10.2147/PRBM.S31458. eCollection 2015. Review. PubMed PMID: 26170728; PubMed Central PMCID: PMC4492627.

URL <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4492627/pdf/prbm-8-171.pdf> (free full text)

Wolkin JR.

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### ABSTRACT

In the last few decades, mindfulness meditation has gained prominence as an adjunctive psychotherapeutic technique. In fact, a vast literature of controlled studies has found that mindfulness meditation is related to improved mental health across a variety of disorders. Elucidating the components involved in mindfulness meditation's positive impact on psychological well-being is an important step in more precisely identifying the populations that would most benefit from its therapeutic utilization. Yet, a consensus regarding the particular underlying mechanisms that contribute to these outcomes is very much limited. There are many reasons for this, including the inconsistent operationalization and use of mindfulness meditation across research investigations. Despite the elusive mechanisms, many studies seem to indicate that cultivating different aspects of attention is a feasible, consistent, and parsimonious starting point bridging mindfulness practice and psychological well-being. Attention in itself is a complex construct. It comprises different networks, including alerting, orienting, and executive attention, and is also explained in terms of the way it is regulated. This paper supports a previously suggested idea that cultivating all aspects of attention through mindfulness meditation leads to greater psychological well-being through decreased ruminative processes. Ruminative processes are decreased by engaging in both focused and receptive attention, which foster the ability to distract and decenter.

PMCID: PMC4492627 PMID: 26170728 [PubMed]

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## READING 3. EVIDENCE-BASED INTERVENTIONS TO MITIGATE BURNOUT

**Williams D, Tricomi G, Gupta J, Janise A.** Efficacy of burnout interventions in the medical education pipeline. *Acad Psychiatry.* 2015 Feb;39(1):47-54. doi: 10.1007/s40596-014-0197-5. Epub 2014 Jul 18. Review. PubMed PMID: 25034955.

URL: <http://link.springer.com/article/10.1007%2Fs40596-014-0197-5> (payment required)

Williams D,<sup>1</sup> Tricomi G, Gupta J, Janise A.

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### ABSTRACT

**OBJECTIVE:** Little is known about the efficacy of current interventions to mitigate burnout among medical students and residents, despite its association with mood disorders, absenteeism, low job satisfaction, and medical errors. This review summarizes the efficacy data of burnout interventions and how each modality is used.

**METHOD:** OVID-SP Medline, Google Scholar and PsychINFO were searched for combinations of medical subject headings (MeSH) terms: premedical students, medical students, internships, intern, medical graduate, clinical clerkship, and residents in combination with a keyword group of burnout, professional burnout, suicide, attempted suicide, and prevention. Studies with data on the efficacy from burnout prevention programs were included for review.

**RESULTS:** Nineteen studies were selected for inclusion in this review. Eleven different types of interventions and combinations of interventions were used. There were six studies on the impact of the 2003 duty-hour restrictions by the Accreditation Council for Graduate Medical Education on burnout. Other approaches included self-development groups, conversion to a pass-fail grading system and training in mindfulness, communication, and stress management. Half of the intervention approaches had at least one study demonstrating benefit in reducing burnout. Self-development groups, the Respiratory One Method for relaxation, and conversion to a pass-fail grading system appear to reduce burnout. The burnout data on mindfulness training and the 2003 resident duty-hour restrictions are mixed. There were no studies available on burnout among premedical students or suicide prevention among medical students or residents.

**CONCLUSIONS:** There is a growing body of evidence-based interventions to mitigate burnout which can be used in the development of future programs. More research is needed to identify and intervene against burnout earlier in the medical education pipeline, including at the undergraduate level.

PMID: 25034955 [PubMed - indexed for MEDLINE]

#### READING 4. PERCEPTIONS OF PHYSICIANS ON TAKING CARE OF THEIR OWN HEALTH

**George S, Hanson J, Jackson JL. Physician, heal thyself: a qualitative study of physician health behaviors. Acad Psychiatry. 2014 Feb;38(1):19-25. doi: 10.1007/s40596-013-0014-6. Epub 2014 Jan 24. PubMed PMID: 24464415.**

URL: <http://link.springer.com/article/10.1007%2Fs40596-013-0014-6> (payment required)

George S,<sup>1</sup> Hanson J, Jackson JL.

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#### ABSTRACT

**OBJECTIVE:** The authors explore how physicians perceive their own health and barriers to healthcare, as well as what might motivate their behavior.

**METHODS:** This qualitative study uses semi-structured interviews of a purposive sampling of physicians, both staff and housestaff, from Walter Reed Army Medical Center and the Medical College of Wisconsin. Transcripts of interviews that probed attitudes and behaviors towards self-care were coded independently by two reviewers using grounded theory qualitative methods.

**RESULTS:** The authors conducted 28 interviews until no new themes emerged. Common barriers to healthcare included inadequate time, fear of consequences, and concern about confidentiality, particularly for stigmatizing diseases identified as mental health problems, chronic pain, substance abuse, and sexual dysfunction. Common behaviors included neglecting one's health, minimizing symptoms, self-diagnosing, and a strong desire not to burden colleagues. Participants were split into those who felt it was fine to self-medicate and others who avoided it. Participants proposed solutions for identified problems, including building time into schedules for self-care, monitoring electronic medical record access to make providers accountable, obtaining care at other institutions, and working to change the culture around healthcare for physicians.

**CONCLUSIONS:** All participants in this study perceived significant unresolved issues pertaining to self-care. Physicians commonly neglect their own care and experience barriers to care, some self-generated and some systems based. The results and suggested interventions provide fodder for future research.

PMID: 24464415 [PubMed - indexed for MEDLINE]

**READING 5. HOW PHYSICIANS CAN TAKE BETTER CARE OF THEIR OWN HEALTH**

**Tan NC, Aw L, Khin LW, Thirumoorthy T, Lim SH, Tai BC, Goh LG. How do primary care physicians in Singapore keep healthy? Singapore Med J. 2014 Mar;55(3):155-9. PubMed PMID: 24664383; PubMed Central PMCID: PMC4293988**

URL: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4293988/> (free full text)

Tan NC,<sup>1</sup> Aw L, Khin LW, Thirumoorthy T, Lim SH, Tai BC, Goh LG.

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**ABSTRACT**

**INTRODUCTION:** Not much is known regarding how primary care physicians (PCPs) in Singapore keep themselves healthy and mitigate ill health. This study aims to determine the health-seeking behaviour of local PCPs and to identify the predictors of local PCPs attaining the recommended level of exercise.

**METHODS:** This study was a cross-sectional questionnaire survey, which included questions on the demographic characteristics, practice profiles and health-seeking behaviour of PCPs. The sampling frame was the 1,400 listed members of the College of Family Physicians Singapore. The anonymised survey was executed in two phases: a postal survey, followed by a web-based survey on the College of Family Physicians Singapore website. The two data sets were collated; the categorical variables, summarised; and the differences between subgroups (based on exercise engagement), compared using Fisher's exact test. The effect of each risk factor on exercise duration was quantified using odds ratio (OR) estimate and 95% confidence interval (CI). Multivariate logistic regression analysis was performed to identify significant predictors of exercise engagement.

**RESULTS:** A total of 631 PCPs participated in the survey—26% were ≤ 34 years old, 58% were male, 21% were single, 34% were singleton practitioners, and 56% were private practitioners. The percentage of PCPs who exercised ≥ 2.5 hours weekly was 29%, while 28% exercised < 0.5 hours weekly. Of the PCPs surveyed, 1% currently smoke, 0.8% drink more than 14 units of alcohol weekly, 60% undertook health screening, 65% had blood investigations done, and 64% had taken preventive measures such as getting influenza vaccination.

**CONCLUSION:** While local PCPs generally did not have undesirable habits such as smoking and alcohol abuse, they could further increase their exercise intensity and undertake more preventive measures such as getting vaccinated against various diseases.

PMCID: PMC4293988 PMID: 24664383 [PubMed - indexed for MEDLINE]

**READING 6. “NEW WAVE” OF THINKING ABOUT COMBINED PSYCHOLOGICAL / PHARMACOLOGICAL TREATMENTS FOR MENTAL ILLNESS**

**Graham BM, Callaghan BL, Richardson R. Bridging the gap: Lessons we have learnt from the merging of psychology and psychiatry for the optimisation of treatments for emotional disorders. Behav Res Ther. 2014 Nov;62:3-16. doi: 10.1016/j.brat.2014.07.012. Epub 2014 Jul 25. Review. PubMed PMID: 25115195.**

URL: <http://www.sciencedirect.com/science/article/pii/S0005796714001156> (payment required)

Graham BM,<sup>1</sup> Callaghan BL,<sup>2</sup> Richardson R.<sup>2</sup>

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**ABSTRACT**

In recent years the gap between psychological and psychiatric research and practice has lessened. In turn, greater attention has been paid toward how psychological and pharmacological treatments interact. Unfortunately, the majority of research has

indicated no additive effect of anxiolytics and antidepressants when combined with psychological treatments, and in many cases pharmacological treatments attenuate the effectiveness of psychological treatments. However, as psychology and psychiatry have come closer together, research has started to investigate the neural and molecular mechanisms underlying psychological treatments. Such research has utilised preclinical models of psychological treatments, such as fear extinction, in both rodents and humans to determine multiple neural and molecular changes that may be responsible for the long-term cognitive and behavioural changes that psychological treatments induce. Currently, researchers are attempting to identify pharmacological agents that directly augment these neural/molecular changes, and which may be more effective adjuncts to psychological treatments than traditional anxiolytics and antidepressants. In this review we describe the research that has led to this new wave of thinking about combined psychological/pharmacological treatments. We also argue that an increased emphasis on identifying individual difference factors that predict the effectiveness of pharmacological adjuncts is critical in facilitating the translation of this preclinical research into clinical practice.

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PMID: 25115195 [PubMed - indexed for MEDLINE]

## READING 7. ENRICHING PRACTICE THROUGH PEER SUPPORT

**Daaleman TP, Fisher EB. Enriching Patient-Centered Medical Homes Through Peer Support. Ann Fam Med. 2015 Aug;13 Suppl 1:S73-8. doi: 10.1370/afm.1761. PubMed PMID: 26304975.**

URL: [http://www.annfammed.org/content/13/Suppl\\_1/S73.full.pdf+html](http://www.annfammed.org/content/13/Suppl_1/S73.full.pdf+html) (full free text)

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### ABSTRACT

Peer supporters are recognized by various designations—community health workers, promotores de salud, lay health advisers—and are community members who work for pay or as volunteers in association with health care systems or nonprofit community organizations and often share ethnicity, language, and socioeconomic status with the mentees that they serve. Although emerging evidence demonstrates the efficacy of peer support at the community level, the adoption and implementation of this resource into patient-centered medical homes (PCMHs) is still under development. To accelerate that integration, this article addresses three major elements of peer support interventions: the functions and features of peer support, a framework and programmatic strategies for implementation, and fiscal models that would support the sustained viability of peer support programs within PCMHs. Key functions of peer support include assistance in daily management of health-related behaviors, social and emotional support, linkage to clinical care, and longitudinal or ongoing support. An organizational model of innovation implementation provides a useful framework for determining how to implement and evaluate peer support programs in PCMHs. Programmatic strategies that can be useful in developing peer support programs within PCMHs include peer coaching or mentoring, group self-management training, and programs designed around the telephone and information technology. Fiscal models for peer support programs include linkages with hospital or health care systems, service- or community-based nonprofit organizations, and partnerships between health care systems and community groups. Peer support promises to enrich PCMHs by activating patients in their self-care, providing culturally sensitive outreach, and opening the way for partnerships with community-based organizations. © 2015 Annals of Family Medicine, Inc.

PMID: 26304975 [PubMed - in process]

## READING 8. EXPERIENCES OF AN INNOVATIVE MODEL IN ACHIEVING MEANINGFUL HEALTH IMPROVEMENTS FOR DIABETIC PATIENTS

**Reichert SM, Harris S, Harvey B. An innovative model of diabetes care and delivery: the St. Joseph's Primary Care Diabetes Support Program (SJHC PCDSP). Can J Diabetes. 2014 Jun;38(3):212-5. doi: 10.1016/j.jcjd.2014.03.008. PubMed PMID: 24909092.**

URL: <http://www.sciencedirect.com/science/article/pii/S1499267114001695> (payment required)

Reichert SM,<sup>1</sup> Harris S,<sup>2</sup> Harvey B.<sup>3</sup>

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### ABSTRACT

The majority of diabetes care in Canada is provided within the primary healthcare setting. It is delivered in a variety of models ranging from the physician working in a solo fee-for-service practice to an interprofessional team setting with specialist collaboration. To augment diabetes-related health services, the Ontario government has provided substantial funding to support community diabetes education programs. These models and initiatives are improving diabetes outcomes, and continued evolution of these programs can provide even greater outcomes.

The St. Joseph's Primary Care Diabetes Support Program (SJHC PCDSP) is an innovative model that incorporates multidisciplinary allied health professionals together with physician support to provide care for more than 3000 patients in London, Ontario, Canada. It embodies the Canadian Diabetes Association (CDA)'s Organizations of Care recommendations to combine patient education and self-management with active medical support at each clinic encounter, all while embodying the tenets of primary care.

A brief review of primary healthcare reform is provided to explain how the SJHC PCDSP combines features of current models in a unique format so as to deliver exceptional patient care. By providing a detailed description of the services delivered at the SJHC PCDSP, it is hoped that both specialists and primary care providers consider using and adapting approaches to diabetes management based on this innovative model to optimize their practices. Copyright © 2014 Canadian Diabetes Association. Published by Elsevier Inc. All rights reserved.

PMID: 24909092 [PubMed - indexed for MEDLINE]

## READING 9. PROVIDING MORE EFFECTIVE CARE THROUGH THERAPEUTIC PATIENT EDUCATION

**Barbarot S, Stalder JF. Therapeutic patient education in atopic eczema. Br J Dermatol. 2014 Jul;170 Suppl 1:44-8. doi: 10.1111/bjd.12932. Epub 2014 May 9. Review. PubMed PMID: 24720486.**

URL <http://onlinelibrary.wiley.com/doi/10.1111/bjd.12932/epdf> (payment required)

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### ABSTRACT

Therapeutic patient education (TPE) is a patient-centred process that entails the transfer of skills (e.g. self-management, treatment adaptation) from a trained healthcare professional to patients and/or their carers. TPE has been shown to help improve adherence, prevent complications, and improve quality of life (QoL) in chronic illnesses such as diabetes, asthma and



cardiovascular disease. Recently, TPE recommendations for patients with atopic eczema have been proposed. TPE is a four-step process: understanding the patient's knowledge, beliefs and hopes; setting age-appropriate educational objectives; helping the patient (or carer) to acquire skills; and assessing the success of the programme. TPE programmes always involve a multidisciplinary team of healthcare professionals, including nurses, psychologists, doctors and dieticians who are expert in the disease area. TPE should be offered to (never forced upon) any patient who has experienced treatment failure, or to families who feel they lack social support. High-quality TPE programmes should be evidence-based, tailored to a patient's individual educational and cultural background (rather than being standardized in form and content), and have well-defined content and activities.

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PMID: 24720486 [PubMed - indexed for MEDLINE]

### READING 10. HIGH PREVALENCE OF SELF REPORTED MEDICATION ADHERENCE IN HONGKONG ELDERLY THROUGH EFFORTS OF FORMAL AND INFORMAL CAREGIVERS

**Leung DY, Bai X, Leung AY, Liu BC, Chi I. Prevalence of medication adherence and its associated factors among community-dwelling Chinese older adults in Hong Kong. *Geriatr Gerontol Int.* 2015 Jun;15(6):789-96. doi: 10.1111/ggi.12342. Epub 2014 Sep 26. PubMed PMID: 25257337.**

URL: <http://onlinelibrary.wiley.com/doi/10.1111/ggi.12342> (payment required)

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#### ABSTRACT

**AIM:** The aim of present study was to describe the prevalence of medication adherence, and to examine its risk factors among Chinese community-dwelling older adults with chronic diseases.

**METHODS:** Secondary analysis was carried out on the data collected from 3167 Hong Kong adults aged ≥60 years who lived in their private home, had at least one type of chronic disease and had completed a screening instrument for long-term care services for the first time in 2006. The outcome variable was the self- or caregiver-reported medication adherence.

**RESULTS:** Among the respondents, 90.8% reported having good medication adherence in the past 7 days. More dependence on activities of daily living ( $P < 0.001$ ), stroke ( $P = 0.003$ ) or diabetes ( $P = 0.036$ ), had medication review by physicians ( $P < 0.001$ ) and received more informal care support ( $P = 0.005$ ) were positively associated with medication adherence, whereas more cognitive impaired ( $P = 0.008$ ), more negative mood ( $P = 0.071$ ) and perceived poor health ( $P < 0.001$ ) were negatively associated with medication adherence.

**CONCLUSIONS:** The prevalence of self-reported medication adherence was high in Hong Kong Chinese community-dwelling older adults. A number of modifiable factors associated with medication adherence were identified, which provides specific targets for interventions. © 2014 Japan Geriatrics Society.

PMID: 25257337 [PubMed - in process]