Welcome to the Spring edition of our quarterly research update from the Department of Family and Community Medicine. If an entry touches on a common interest, please reach out to discuss potential collaborations.

-Chris White, MD, JD, MHA
Director of DFCM Research Division

Charles Doarn, MBA Heads Midwest Global Health Conference

The University of Cincinnati hosted the 2018 Midwest Global Health Conference on February 24, 2018. The event was held in the Care Crawley/MSB complex and was sponsored by UC, Cincinnati Children’s Hospital Medical Center, University of Louisville, University of Kentucky, Marshall University, Wright State University, West Virginia University, and Pikeville Osteopathic School. The focus was “Global Health: Emerging Issues in Our Current Environment – Interdisciplinary Approaches”.

The conference was attended by 150 registrants, representing a wide variety of learners from all partnering universities, CCHMC, and community health organizations. The conference included two plenary sessions and six concurrent breakout sessions covering a wide range of subjects. In addition, there were three competitions, each focused on a global health experience – an essay (8 submissions), a photo contest (22 submissions), and posters (17 submissions). The plenary sessions included a keynote address from Dr. Jason Johnson, Dean of Lincoln Memorial University, a panel of distinguished guests, a presentation by DAAP – as design influences health, and a student panel lead by a first year medical student.

College of Medicine Dean Dr. William Ball welcomed all the attendees and his comments set the stage for a very informative conference. Dr. Kate York from the College of Nursing also assisted as co-chair with Mr. Doarn. Xan Boone, PhD from the School of Social Work also gathered a number of volunteers from Allied Health and medical students helped facilitate the overall success of the conference.
The EMPOWER study (Evaluating the ability to reduce Morphine equivalent dose for chronic Pain patients receiving Opioid-therapy through a Web-based E-Health self-management program: a Randomized multi-site clinical trial in primary care) is a 5 year NIDA funded led by Dr. Theresa Winhusen in UC Department of Psychiatry. Co-investigators and DFCM Research Division team members Nancy Elder, MD and Soni Regan, PhD, along with study coordinator MaryBeth Vonder Meulen have completed the initial assessment of the 16 primary care practices in the Cincinnati Area Research and Improvement Group Practice Based Research Network that are participating. The practices are all UC Health primary care practices and they provide care to 87,555 patients. An analysis of the primary care practices’ assessments of the chronic care management support for their patients with chronic pain has been submitted to the North American Primary Care Research Group Annual Practice Based Research Network Meeting.

The DFCM EMPOWER team is now recruiting patients from these practices who have chronic pain and who take chronic opioids. 200 patients will be recruited to participate in this trial comparing the effectiveness of a web-based Chronic Pain Management Program to Treatment as Usual on reducing opioid dosage and improving pain scores. For more information, contact DFCM Research Program Coordinator Sarah Brubaker:

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WELLNESS CORNER

By Mary Beth Vonder Meulen, RN

Is your work actually killing you? Harvard researchers asked this question when looking at stress in the workplace. A stressful workplace causes your body to react in the same way as it would to physical danger. Over time, the surge of adrenaline and cortisol can lead to high blood pressure, weakened immunity and obesity.

So what can you do to decrease the amount of stress on the job?

**Ignore your email.** One study found that checking email caused an increase in blood pressure, heart rate and cortisol level. Instead of constantly checking and responding to email, set aside a time to manage email at the beginning, middle and end of the workday.

**Monotask.** Our brains did not evolve to multitask. If you have an important task, set aside an hour at the time of day when you are at your most alert. Ask your colleagues not to interrupt and silence your phone. You will be more productive and less likely to make time-consuming errors.

**Pay attention to your body’s ability to focus.** Most of us lose the ability to concentrate on a task after 60-90 minutes. Set the task aside when your focus is dwindling. Get up and stretch, take a short break. Your brain will thank you for it!

**Take control of your environment.** Clutter can cause a stress response so clean up your work area. This small step can help you to feel that you are in control.

Charles Doarn, MBA

Contributes to NASA Health Publication


The concept of a ‘Rosetta stone’ draws its analogy from the original ancient rock decree, engraved in three distinct lexicons. This NASA special publication summarizes the differences in medical/life sciences and engineering communities of practice and offers ten recommendations to improve communications and understanding between these communities. This is extremely important in complex systems such as human-rated spacecraft as well as the design of healthcare system components.
Nancy Elder, MD & Chris White, MD
Lead Neuropathy Clinical Study

Members of the DFCM Research Division are leading a randomized control trial of an over-the-counter homeopathic rubbing oil vs. placebo rubbing oil for immediate relief of leg and foot neuropathy pain. The project, funded by Wise Consumer Products, began in March, 2018. This trial will study whether a currently available over-the-counter homeopathic Neuropathy Rubbing Oil Product produces superior pain relief compared to placebo in patients with peripheral neuropathy on the legs and/or feet as measured by a modified Neuropathy Pain Scale (NPS).

The National Center for Complementary and Integrative Health note that Homeopathy is one of the most controversial parts of Complementary and Integrative Health. But a 2012 survey found that an estimated 5 million adult Americans use homeopathic products with out-of-pocket expenses of $2.9 billion for homeopathic products.

Based on its ongoing use, well-done clinical trials are important to assess the efficacy of existing homeopathic products. We will recruit 50 patients who have peripheral neuropathy for this cross-over clinical trial. Dr. Nancy Elder and Dr. Chris White are study co-principal investigators and Research Division team member Mary Beth Vonder Meulen is the study coordinator.

DISSEMINATION

Books Recently Published


Manuscripts Recently Published or In Press


Posters and Presentations


Global Health Projects: Anticipatory Guidance for Parents in Guatemala by Allison Ng, MD

In October 2015, The Christ Hospital/UC Family Medicine Residency sent its first group of residents to work with Wuqu’ Kawoq/Maya Health Alliance in Guatemala. I was one of those residents. This trip marked the start of a lasting and mutually beneficial relationship, adherent to global health ethics principles. Fast forward two and a half years to April 2018, and our relationship is going strong. I recently returned with our tenth group of residents to work with Wuqu’ Kawoq (my third time).

Wuqu’ Kawoq is a non-governmental organization (NGO) founded in 2007 with a commitment to providing healthcare to rural Guatemalans. Though a public health system exists, there are many barriers to access, especially to rural, predominantly indigenous Guatemalans. Barriers include cost, transportation, language, and culture. There are over 21 Mayan languages spoken in Guatemala; many people living in rural areas speak little to no Spanish, which is often the only language used in the public health system. Indigenous Guatemalans also face significant discrimination within the public health system. Wuqu’ Kawoq aims to break down these barriers so that people do not have to choose between their culture and their health. Their staff is comprised of both Guatemalan and American physicians as well as a fleet of community health workers (CHWs) of varying backgrounds (some nurses, some simply engaged members of the community) and researchers.

Part of our role with Wuqu’ Kawoq is to help see patients and identify those who need further care and assistance. Another important part, however, is to make a sustainable difference through partner capacity building. One of the most effective ways we have been able to do this is to find ways to empower their existing staff of CHWs.

At the end of the last academic year several residents and faculty met with leaders of Wuqu’ Kawoq to determine areas of need for 2017-2018. They noted the lack of the concept of a “well child check” in Guatemala. Out of this, we agreed to find a way to incorporate anticipatory guidance into the organization’s pediatric visits. This year the interns at our residency, along with a resident from Cincinnati Children’s Hospital, developed a booklet of anticipatory guidance for parents of children from newborn to 5 years of age.

The booklet is divided into seven age groups: newborn to 1 week, 1 week to 2 months, 2 months to 6 months, 6 months to 9 months, 9 months to 12 months, 12 months to 2 years, and 2 years to 5 years. Five to six guidance pearls were developed for each age group based on UNICEF/World Health Organization Care for Child Development: Participant Manual. During the November and February trips to Guatemala, the interns were able to make observations to select and modify the guidance to be culturally sensitive and applicable. For example, advice against co-sleeping was initially included, but this is so widely practiced in Guatemala (often times because there is no other place for babies to sleep) that this piece of guidance was dropped from the booklet. Images were included to help explain the guidance to parents (many parents are unable to read). The booklet was initially written in Spanish, as the intent was to pass this tool on to Wuqu’ Kawoq’s CHWs who are all native Guatemalans. The booklet was translated into English by a member of UC’s medical Spanish class so that the residents and medical students on the April trip (most of whom did not speak Spanish) could pilot use of the booklet. Interns also assisted in creating (in English) further explanations of each guidance pearl for providers to reference in the event that parents do not understand the concept or have further questions. In follow-up with our April trip providers and interpreters who used the booklet we learned some important points:

1. Parents were more engaged when only 1-3 guidance pearls were reviewed.
2. First-time parents were more engaged, asked questions.
3. More experienced parents already knew many of the guidance pearls, but had not followed them for some reason.
4. Motivational interviewing skills helped explore why parents weren’t following guidance that they already knew.

Based on feedback from Wuqu’ Kawoq, our next step is to increase the images in the booklet. We will be working with a Guatemalan designer to develop customized, culturally appropriate images. Other future steps are to edit the language and grammar of the booklet to be consistent with Guatemalan Spanish, translate the reference into Spanish, and develop training for CHWs to use the booklet. Our goal is to have everything ready for our November 2018 group to present to Wuqu’ Kawoq’s CHWs.

Fig. 1. Languages of Guatemala by Region

Fig. 2. Sample Page from Booklet

References
Wuqukawoq.org
UNICEF/WHO Care for Child Development: https://www.unicef.org/earlychildhood/index_68195.html
Scholarship Development Fund Reflects on Successes Before Brief Hiatus

The Department’s Scholarship Development Fund (SDF) will not be funding any new projects for the coming academic year. We expect to open up for the next cycle of small faculty pilot project funding in the following year so please keep those ideas churning and stay tuned to this column for future updates on available funding. Even small ideas can be the basis of a larger grant opportunity.

This past year or so has seen some wonderful outcomes. The SDF has provided a springboard for a number of excellent projects that our faculty have pursued these past two years. Each was peer-reviewed within the Department and each resulted in some form of outcome.

These small projects have provided a foundation for both new researchers and veteran researchers to expand a concept that have led to new data, a scholarly product or perhaps a new idea or approach. The wonderful and very capable staff of the Research Division have supported the aforementioned projects.

-Charles Doarn, Professor and SDF Chair

Dr. Sarah Pickle conducted a survey of transgender providers, which will result in a publishable manuscript and a few poster presentations.

Dr. Nancy Elder used a survey to reviewed EHR data on opioid prescribing in primary care practices. The data was shared with the WPRN who is collating data from other PBRNs.

Dr. Oded Zmora looked at uric acid levels in primary care patients with prediabetes.

Professor Charles Doarn looked at the barriers to adoption of telemedicine and telehealth in primary care with UC Health. This effort has led to the development of a graduate level Certificate of Telehealth Program with the Colleges of Medicine and Nursing. The program is in review now for approval.

Dr. Robert Smith Celebrates His 97th Birthday with the Department of Family & Community Medicine
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Dedicated full-time staff members with over 50 years of cumulative experience provide full project support from assisting in design and implementation to analysis and evaluation. The division offers expertise in:

- Project Management
- Data Management
- Grant Writing
- IRB Protocols
- Statistical Analysis
- Data Collection Methods
- Project Reports
- Manuscript Development, Writing and Editing
- Research Nurse
- Qualitative Research

For more updates on our projects and other events in the UC Department of Family & Community Medicine, please like our Facebook page today!

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