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Summer 2016

Family Doctor

A JOURNAL OF THE NEW YORK STATE ACADEMY OF FAMILY PHYSICIANS

FEATURE ARTICLES:

- Two Views
- Incorporating Acupuncture into Primary Care
- Chronic Pain: From Public Crisis to Integrative Relief
- Integrative Nutrition

Focus:

Integrative Medicine

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Vitamin A	10
Niacin	10
Vitamin C	4

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Calories 85

Serving Size = 8 ounces

	% Daily Value
Calcium	30
Vitamin D	25
Phosphorus	20
Riboflavin	20
Protein	16
Vitamin B-12	13
Potassium	11
Vitamin A	10
Niacin	10
Vitamin C	4

Sugar **20 g**
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Calories 132

Serving Size = 8 ounces

	% Daily Value
Calcium	2
Vitamin D	0
Phosphorus	4
Riboflavin	6
Protein	2
Vitamin B-12	0
Potassium	15
Vitamin A	2
Niacin	4
Vitamin C	140

Sugar **21 g**

Calories 120

Serving Size = 8 ounces

	% Daily Value
Calcium	2
Vitamin D	0
Phosphorus	0
Riboflavin	4
Protein	0
Vitamin B-12	0
Potassium	2
Vitamin A	0
Niacin	0
Vitamin C	2

Sugar **28 g**
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Calories 120

Serving Size = 8 ounces

	% Daily Value
Calcium	0
Vitamin D	0
Phosphorus	10
Riboflavin	0
Protein	0
Vitamin B-12	0
Potassium	2
Vitamin A	0
Niacin	0
Vitamin C	0

Sugar **32 g**
(Includes 7.6 tsp added sugar)

Calories 130

Serving Size = 12 ounces

	% Daily Value
Calcium	0
Vitamin D	0
Phosphorus	0
Riboflavin	0
Protein	0
Vitamin B-12	0
Potassium	0
Vitamin A	0
Niacin	0
Vitamin C	0

Sugar **0 g**

Calories 0

Serving Size = 8 ounces

	% Daily Value
Calcium	0
Vitamin D	0
Phosphorus	0
Riboflavin	0
Protein	0
Vitamin B-12	80
Potassium	2
Vitamin A	0
Niacin	30
Vitamin C	2

Sugar **22 g**
(Includes 5.3 tsp added sugar)

Calories 120

Serving Size = 12 ounces

	% Daily Value
Calcium	0
Vitamin D	0
Phosphorus	4
Riboflavin	0
Protein	0
Vitamin B-12	0
Potassium	0
Vitamin A	0
Niacin	0
Vitamin C	0

Sugar **33 g**
(Includes 7.9 tsp added sugar)

Calories 140

Serving Size = 12 ounces

	% Daily Value
Calcium	2
Vitamin D	0
Phosphorus	4
Riboflavin	4
Protein	0
Vitamin B-12	0
Potassium	0
Vitamin A	0
Niacin	0
Vitamin C	0

Sugar **0 g**

Calories 0

Serving Size = 12 ounces

USDA National Nutrient Database for Standard Reference, Release 26. The sugar and calorie data for fat free white and chocolate milk are representative of milk available in 2013-2014 school year – MilkPEP School Channel Survey. % Daily Values are based on a 2,000 calorie diet.

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Articles

Incorporating Acupuncture into Primary Care
By Lisa Morrow, DNP, FNP, L.Ac 20

Chronic Pain: From Public Crisis to Integrative Relief
By Michael Spertus, MD and Pooja Amy Shah, MD 23

Integrative Nutrition
By Kaushal B. Nanavati MD, FAAFP, ABIHM and Benjamin Kim, BS. 26

The Paleo Diet as a Therapeutic Tool
By Ann Carey Tobin, MD, FAAFP 29

Can Eating High Fat Improve Health?
By Shree Mulay, MD and Joon Lee, MD 32

Decreasing Wait Times in a Family Medicine Clinic – A Creative Approach
By Shilpa Darivemula; John Huppertz, PhD; and Elena Rosenbaum, MD, ABOIM 35

Integrating MBSR in Primary Care
By Carla Podgurecki, MD 39

Integrative Pain Management with an Underserved Population
By Maureen Healy, LCSW, MPH, LMT; Lisa Morrow, DNP, FNP, L.Ac; Robert Simon, MD; and Patrick Masseo, MA 41

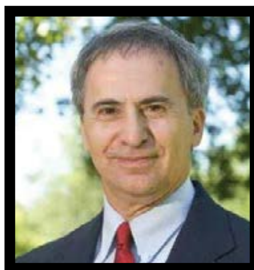
Moving Medicine into the Third Era: Creating Optimal Health and Well-Being
By Mark Nelson, MD, FACC, MPH 44

Departments

From the Executive Vice President: Vito Grasso 6
President's Post: Robert Ostrander, MD, FAAFP 8
Advocacy: Marcy Savage 10
Two Views: Integrative Medicine 14
View One: The Appeal of the CAM Rhetoric & Lessons for Biomedicine – Utsav Hanspal, MD, MPH
View Two: Integrative Medicine – Family Medicine at its Best Kaushal Nanavati, MD, FAAFP, ABIHM
Upcoming Events 21
In the Spotlight 47

Index of Advertisers

American Dairy Association .... IFC
American Academy of Child & Adolescent Psychiatry .... BC
Atlantic Health Partners 19
Core Content Review 13
Fidelis Care 9
Marley Drug 7
MLMIC 4
Mount Sinai Roosevelt Hospital 3
Saratoga Hospital 11



From the Executive Vice President

By Vito Grasso, MPA, CAE

Integrative Care

Integrate means to combine one thing with another. The implication of course, is that the things being integrated are, otherwise, different. Indeed, the tone of much of the discussion about integrated medical practices is that traditional practices have not included things like nutrition counseling, non-drug therapies for pain, smoking cessation or other services to keep patients healthy. To the extent that this is true, I think it is a consequence of how insurance has affected medicine. Health insurance has essentially evolved as a mechanism for dealing with catastrophic costs associated with serious illness or injury. Premiums are contributed to a pool of funds for use in paying for care when that time ultimately arrives. The assumption has been that people are responsible for maintaining their own health.

Interest in integrated care seems to be growing among insurance plans as they recognize that keeping patients healthy can reduce costs. Not quite altruism, but still a development that could help enhance healthy lifestyles among people who may benefit from the additional incentive of having someone else pay, at least in part, for their health club, diet, smoking cessation class or other form of behavior modification.

In reviewing articles submitted for this issue I found interesting and informative contributions on the value of nutrition in health, non-drug approaches to pain management, stress reduction strategies and how incorporating non-medical services into a practice can enhance the practice's ability to help patients maintain good health. In this regard, much of the discussion around integrative care is, indeed, about interjecting health awareness and prevention into practices as an alternative to the traditional focus on treating disease and injury. Inevitably, such discussions quickly include some reference to how practices get paid for keeping patients healthy.

As payers grapple with the challenges of valuing investment in non-medical services to keep patients healthy and, thereby, reduce their costs of health care, I am compelled to point out how different the standard of value appears to be for clinicians. The articles in this issue by clinicians uniformly explore the value and potential of non-medical services to enhance patient health. I do not recall seeing many references in those articles to the issue of payment for those services. In this regard, it is significant to note that the focus of clinicians on doing what is best for patients is an element in the business relationship between patients and health insurance plans that is beyond the calculus of determining value.

Read with interest the many good articles in this issue about non-medical services that can truly help patients. But to understand what it means to be a caring, compassionate, patient-centered professional whose work and purpose has value well beyond what insurance plans have a rate schedule for, read Dr. Ostrander's president's column and aspire to replicate the standard of decency reflected in the impressions he chose to focus on in his inaugural president's column for this journal.

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President's Post

By Robert Ostrander, MD, FAAFP

When I first considered this initial president's article for the journal, I thought I would lay out my goals for engaging the various powers-that-be about advanced primary care and value based payment, but while I was out taking a walk the other day, I decided it would be a better idea to start at the heart of what we do.

E.T. was a man about my age who lived two fields over from my house and office, walking cross-lots. He was a good friend, mostly through years of taking our sons on scouting primitive camping trips. His son and my son (who is also my partner) have been best friends since pre-school. He was also a patient for most of the thirty years I have been in practice here.

He came to me in early February with a few months of nagging side pain, anorexia and weight loss. With a sinking heart, but determined to step up I shared my suspicions and made it clear that I would guide him through whatever we found. Workup showed a small but widely metastatic, poorly differentiated esophageal cancer.

The day I got the pathology back, he came over to the office at the end of the day to go over things. He chose not to bring his wife. We talked on every level of our relationship. I think we hit all the Kubler-Ross stages. We talked about the disease, the prognosis, what we would do to see if there were treatment options, how I could help shepherd him through dying. We talked about the best way to let his family know—I offered to have his wife come over then, but he wanted to tell her privately at home. We talked about our sons, we reminisced about camping, we decided that we each had things we wanted to do, still, but that our necessary work on this earth—raising caring and capable sons (and in my case daughters)—was complete.

I called my favorite chest surgeon at the University Hospital, who as always took lots of time with my friend and his wife to lay out the prognosis and options, even though the approach was non-surgical. The large medical oncology practice in town gave him an appointment in 10 days, and couldn't possibly see him any sooner, because they were "double booked." I called another oncologist in a two physician private practice in the next town, and he called E.T. and his wife that evening from home and saw them the next day.

We talked about the disease, the prognosis, what we would do to see if there were treatment options, how I could help shepherd him through dying.

Things got worse quickly, and we sorted out goals and moved toward home hospice. One Friday, before that decision was firm, he was pretty depleted when I saw him in the office. He really didn't want to go to the ED for fluids and certainly didn't want to be admitted. So, we gave him 2 liters of IV fluids in the office. That helped a lot for a couple of days. He was still considering an oral chemotherapy program at that point, and three days later he wanted another infusion. As I was in Albany for Lobby Day, my son took care of him and gave him 2 more liters in the office.

In the remaining couple weeks, we arranged for paracentesis for comfort a few times--my secretary has gotten very good at being sure patients get what they need and set it up so he could be "in and out." I walked over with my black bag and made house calls. One evening, less than 8 weeks after that first visit, his wife told me that while she was chatting with their son and daughter-in-law in the kitchen, and their grandchildren were playing on the floor nearby, he sighed twice and died quietly and peacefully.

I could write pages and pages about the lessons in this story. I could talk about the ways that excellent clinical care and deep caring go hand in hand. I could talk about how important it is to choose the right colleagues based not only on their expertise, but also on their commitment. I could talk about the way patients teach us life lessons and inspire us. The point is not to expand on these things, but rather, amidst all the hassles and distractions, to bring them "front and center."

So, this is what we do. This is also what good subspecialists do. NCQA PCMH will never recognize this. Value based payment analysts and accountants will never figure out how to "value" this. When we look to them as the primary source of reward for the essence of what we do, we become bitter and burned out. Being a physician is a job and a career, but it is first and foremost a calling.

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Albany Report

By Marcy Savage

2016 PROPOSED CHANGES TO NYS DRUG POLICIES - THE GOOD, THE BAD & THE UGLY

As of this writing, the Senate and Assembly are actively working to pass remaining member priority bills and complete the 2016 session. At this point, a total of 521 bills have been passed by both houses and await action by Governor Andrew Cuomo in the coming months.

Included in the acted on legislation are multiple bills proposing to make significant changes to laws regarding the prescribing, dispensing, insurance coverage of and treatment related to prescription drugs. While the New York State Academy of Family Physicians scored some important victories that we have advocated for this session and in some cases, multiple years, some initiatives that the Academy has been concerned with and even opposed were advanced during this session.

The following is a summary of these bills. Note that all still need to be reviewed/approved by Governor Cuomo before becoming law. Also once the 2016 session is officially completed, Reid, McNally & Savage (RMS) will be preparing a comprehensive update on all healthcare-related bills passed by both houses this year for member review.

We would like to thank NYSAFP President, Dr. Tochi Iroku-Malize, President-elect Dr. Robert Ostrander, Advocacy Chair Dr. Marc Price, EVP Vito Grasso and other Academy leaders for their support, guidance and efforts this session on the Academy's legislative agenda focused on improving healthcare access and promoting high quality family medicine for patients throughout the state.

NYS Changes in Drug Policy: "The Good"

Legislation to Regulate Health Insurer Use of Step Therapy (Fail First Policies) Passed by Both Houses

"When treating a patient, there's nothing more frustrating than knowing the medication you have prescribed is being denied," said Dr. Marc Price, Advocacy Chair, NYS Academy of Family Physicians. "Responsible limitations on the use of step therapy means that patients will receive the care they need when they need it."

NYSAFP Quote Included in 6/16/16 press release issued by Senator Young, Assemblyman Titone and coalition supporting bill to regulate step therapy in NYS

For several years, NYSAFP has been a lead organization in a coalition working to regulate health insurer use of step therapy (fail first) policies in New York. Two years ago the Academy surveyed its membership on this issue and found the following:

- 90% of physicians indicated that step therapy protocols at least "sometimes" adversely affected their patients;
- 46% indicated that it "frequently" adversely affected patients; and
- 94% of respondents support the concept of requiring insurers to provide an expedited process to exempt patients from step therapy protocols when the drug they prescribed is medically necessary.

NYSAFP worked with the state Medical Society (MSSNY) to issue a release of these results along with a similar MSSNY survey. Together, we called for the need to limit the use of these policies and put medical decision-making back in the hands of physicians who know their patients best.

This year, NYSAFP participated in a lobby day and other advocacy efforts throughout the session jointly with a coalition of nearly 70 patient advocacy and medical organizations to advocate for the passage of S.3419C, Young/A.2834D, Titone. Importantly, the bill includes two basic patient protections to improve the safety and efficacy of such policies:

(1) It requires that the clinical review criteria used by an insurer to establish fail first/ step therapy policies be based on science and evidence-based clinical practice guidelines to ensure that they are not exclusively driven by cost; and

(2) It requires a clear and expedient appeals process through utilization review that can be used by physicians and other prescribers to request an override of a fail first/ step therapy requirement. Under the bill, an override would be given if the patient's physician demonstrates that the drug(s) being required by the insurer:

a) will likely cause patient harm

b) is expected to be ineffective

c) has been tried by the patient and was proven ineffective

d) the patient is stable on the drug being recommended by the physician, or

e) the drug is otherwise not in the best interest of the patient.

As a result of the strong efforts by the Academy and its many partners, this week both the Senate and Assembly passed this bill unanimously! We will now work to secure approval for the bill by Governor Cuomo, over the strong objections and opposition by the health insurance industry.

Important E-Prescribing Changes Passed by Both Houses

During NYSAFP's 2016 lobby day in March and throughout the session, we have been advocating for the passage of legislation to allow a physician or other authorized prescriber to simply note in their patient's health record if they need to use one of the permitted exceptions to the mandatory e-prescribing law for controlled and non-controlled prescriptions. Currently, this information has to be conveyed to the NYS health department via email for each instance where a physician must use an exception and write a paper prescription. This legislation (S.6779B, Hannon/ A.9335B, Gottfried), passed both houses in recent weeks. Now we will seek approval by the Governor once the bill is transmitted to his desk for consideration.

Also in the final days of the session, both houses have passed legislation (S.7537-A, Martins/ A.10448, Schimel) to allow pharmacies to immediately transfer/forward an electronic prescription to another pharmacy at the patient's request, in the event that the pharmacy has the medication out of stock or the patient determines that they need or

continued next page

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prefer to use an alternative pharmacy. This will reduce the need in these cases for the pharmacist to contact the prescriber and request a new prescription. This bill has not yet been transmitted to the Governor for consideration.

Opioid/Heroin Package Expands Insurance Coverage and Treatment Options for Those Suffering from Addiction

On June 14th, an agreement was announced on a package of bills to address the state's opioid/heroin epidemic by Governor Cuomo and legislative leaders. The package relates to multiple areas including insurance coverage, treatment services, medical and pharmacy practice and others in response to the state's heroin and opioid crisis. The bills were quickly advanced through both houses this week and will be signed by the Governor since they reflect a three-way agreement and are his program bills.

When announcing the agreement, Governor Cuomo said, "*New York and the nation as a whole is grappling with how to combat heroin and opioid addiction and, with this comprehensive plan, we are continuing to take decisive action to end this epidemic and protect our families and communities…This multi-faceted legislative package will increase access to treatment, expand prevention strategies, and save lives by helping ensure New Yorkers struggling with addiction have access to the services and resources they need to get well.*"

Below is a summary of the package of bills - S.8137, Ortt/ A.10725, Rules (Steck); S.8138, Amedore/ A.10726, Rules (Cusick); S.8139, Murphy/ A.10727, Rules (Rosenthal)- which make positive, meaningful changes in this area.

Insurance Coverage Expansion/ Requirements

Prior Authorization Changes:

- Requires insurers to cover necessary inpatient services for the treatment of substance use disorders without prior authorization.
- Requires that utilization review can begin only after first 14 days of treatment.
- Prohibits insurers from requiring prior approval for emergency supplies of medications (5 days) to manage withdrawal symptoms or maintain recovery; similar provisions will apply to managed care providers treating individuals on Medicaid who seek access to buprenorphine and injectable naltrexone.

Criteria for Level of Care Determinations:

- Requires all insurers operating in New York to use objective, state-approved criteria when making coverage determinations for all substance use disorder treatment.

Access to Naloxone:

- Requires insurance coverage for opioid overdose-reversal medication (naloxone) for a covered individual or his/her family members on the same insurance plan.

Treatment Changes

Evaluation Expansions:

- Provides for 72-hour emergency treatment (increase from the current 48 hours) for individuals incapacitated by drugs.

Hospital Discharge Planning:

- Requires hospitals to provide discharge-planning services to connect at-risk patients with nearby treatment options.

Expand Naloxone Administration:

- Authorizes trained professionals to administer naloxone in emergency situations without risk to their professional license.

Expand Wraparound Services:

- Extends the state wraparound program created in 2014 to provide services to individuals completing treatment including education and employment resources; legal services; social services; transportation assistance, childcare services; and peer support groups.

Pharmacy Requirements/Changes

Educational Materials on Drug Addiction and Abuse:

- Requires pharmacists to provide educational materials prepared by DOH and the Office of Alcoholism and Substance Abuse Services to consumers about the risk of addiction, including information about local treatment services when dispensing controlled substances. Such materials may be provided in hard copy or by electronic means at the option of customers. Note, earlier versions of this proposal would have required physicians and other prescribers to also provide counseling, referral information and these educational materials to all patients when prescribing an opioid. NYSAFP and the medical community were successful in defeating this proposal.

Needles/Syringes:

- Authorizes pharmacies to offer counseling and referral services to patients who are purchasing hypodermic syringes. Such counseling/referral would relate to preventing injection drug abuse, the provision of drug treatment, preventing and treating hepatitis C, preventing drug overdose, testing for HIV, and providing pre-exposure prophylaxis and non-occupational post-exposure prophylaxis. The provision of such counseling/referral services shall be voluntary and at the discretion of the pharmacist.

Data Collection

Data Collection on Overdoses:

- Requires the State Commissioner of Health to report county-level data on opioid overdoses and usage of overdose-reversal medication on a quarterly basis.

NYS Changes in Drug Policy: "The Bad & the Ugly"

Opioid/Heroin Package Imposes Initial Opioid Fill Limits and Mandatory CME in Pain & Addiction

Medical Practice Changes

Opioid Prescriptions:

The final opioid/heroin package reduces prescription limit for the initial treatment of acute pain with a schedule II, III or IV opioid from 30 days to 7 days. According to the language:

- Acute pain is defined as pain, whether resulting from disease, accidental or intentional trauma, or other cause, that the practitioner reasonably expects to last only a short period of time.
- This 7-day limit shall not apply to chronic pain, pain treated as part of cancer care, hospice or other end of life care/palliative care.
- Upon subsequent consultation for the same pain, the practitioner may issue any appropriate renewal, refill or new prescription for the opioid or other drug for up to 30 days.
- Patient co-pays for the initial "up to 7 day" fill may be pro-rated or a patient may be charged the 30 day co-pay and if there are subsequent prescriptions within that time period there shall be no additional co-pay.

NYSAFP joined with MSSNY and others in the medical community in strongly opposing this measure since no patient's pain is the same and professional medical judgement should prevail. *Note, earlier versions included a "5 day" limit so some changes were made to provide up to a one week's supply but serious concerns remain.*

Mandatory Continuing Education:

- The final package also includes a measure to require prescribers (registered under the federal controlled substance act and in possession of a DEA registration number) to complete a 3 hour course every 3 years in addiction, pain management and palliative care beginning July 1, 2017. This would be enforced through prescriber attestation to the NYS DOH on a form that will be created by DOH. An exemption from this requirement may be provided to a prescriber who:

-demonstrates to DOH that there would be no need for him/her to complete such course work; or

-demonstrates that he/she has completed a course deemed by DOH to be equivalent to the course approved by DOH.

As members are aware, the issue of mandatory CME by physicians and other prescribers in addiction, pain management and palliative care has been advocated for several years, including as part of the 2012 ISTOP law and aggressively since we succeeded in not having the requirement included in that law. This issue has become highly emotion-charged and political with families who have lost children and other loved ones to addiction being the primary proponents of this measure. While NYSAFP and all in organized medicine are sympathetic to these losses, we have also noted that there is no evidence that mandatory CME has an impact on prescribing practices. After many years of a strong and successful defense, this year the Governor made this a top priority and along with certain members of the legislature fought hard to impose a CME mandate in this area. While the outcome is disappointing, we would like to thank members for their strong, multi-year efforts on this issue.

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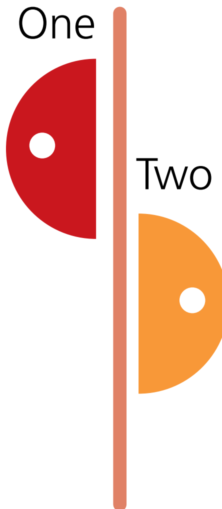
VIEW ONE: THE APPEAL OF THE CAM RHETORIC & LESSONS FOR BIOMEDICINE

By Utsav Hanspal, MD, MPH



As a direct consequence of our predilection for intuition and magical thinking, humans have a plethora of cognitive biases that affect decision-making. Many medical outcomes depend on the choices made by the patients. From deciding to use complementary and alternative medicine (CAM), choosing whether or not to exercise, implementing a healthy diet, quitting smoking, obtaining an annual physical exam, or getting vaccinated, patients make numerous choices. As with any decision, people do not always decide in a normatively rational manner (DiBonaventural & Chapman, 2008) and (Kahneman, Slovic, & Tversky, 1982). Although there are several cognitive biases, within the context of CAM, naturalness bias, defined as the tendency to prefer natural products or substances even when they are identical to or worse than synthetic alternatives, is particularly important (DiBonaventural & Chapman, 2008). The presence of this bias is inversely associated with both vaccination intention and behavior. This finding has profound public health implications in that it may cause people to decline effective synthetic treatments or pursue natural remedies that are ineffective or even harmful. The CAM rhetoric exploits this naturalness bias and provokes the preexisting fear of science.

The nostalgic among us look back with rose-tinted glasses and reminisce about a simpler age that seems more wholesome and less threatening than the uncertain future. We look to ancient cultures for prescientific knowledge, simple living, and spiritual enrichment. We want to get back to nature. Yet we conveniently ignore the fact that, as Thomas Hobbes observed, life in such times was "poor, nasty, brutish and short" (Hobbes, 1996). The truth is that '*the good old days'* never existed. According to Carey K. Morewedge, associate professor of marketing at Carnegie Mellon University's Tepper School of Business, we often cherry-pick our favorite memories and leave out the unpleasant ones, which explains why we view the past through such rose-colored glasses (Morewedge, 2013).

Regardless, the appeal of CAM relies heavily on this sentimentality. To better understand, it is worth exploring the foundations of a persuasive argument. Aristotle's treatise *Rhetoric* discusses three aspects of persuasion, namely *ethos*, *pathos*, and *logos* (Bracet, 1992). *Ethos* refers to 'ethical proof' or the speaker's credibility. An

continued on page 15

VIEW TWO: INTEGRATIVE MEDICINE – FAMILY MEDICINE AT ITS BEST!

By Kaushal Nanavati, MD, FAAFP, ABIHM

Allow me to introduce you to integrative medicine which is truly an evolution and revolution in family medicine. In doing so, I wish to clarify some of the biases and misinformation about what integrative medicine actually is and what it is not. I would first like to disclose that I am a board certified family physician and a board certified integrative medicine physician so I have my inherent biases related to the welfare and wellness of patients, our communities, and our system of health care. Our current systems of health care and medical education have primarily focused on disease, as have the business models which support them. While important and necessary, this is not comprehensive enough. Only when we are able to connect those who have special training and focus on wellness with those who are experts in disease orientation will we have a system of care that is truly complete and comprehensive. At this crossroads lies integrative medicine and family medicine. I believe that integrative medicine is good old-fashioned family medicine the way it was always intended to be.

The notion of complementary and alternative medicine (CAM) as an entity is outdated. If you look on the NIH website you will see that what was formerly known as the "National Center for Complementary and Alternative Medicine" (NCCAM) is now known as "the National Center for Complementary and Integrative Health" (NCCIH).[1] The word 'alternative' has been consciously removed from the title, as the terms, 'complementary' and 'alternative' are not synonymous.

Complementary medicine encompasses modalities, therapies and techniques that are supported by some level of evidence and intended to be utilized in an evidence guided manner in conjunction with conventional therapies. Alternative medicine is the label used for those approaches that are not necessarily grounded in evidence that patients and/or their providers utilize in lieu of standard conventional therapies. This is a necessary distinction as integrative medicine is the appropriate and evidence guided utilization of conventional and complementary modalities and not alternative modalities

For example, an integrative approach to caring for cancer patients adds multiple dimensions to the way in which we can heal patients. A simple discussion with patients about their journey with cancer focusing on living with cancer rather than dying and reinforcing the

continued on page 17

argument is inherently more convincing when put forth by a reliable and authoritative yet honorable personality (Bracet, 1992). *Pathos* refers to the emotional charm of an argument (Bracet, 1992). It is well known that the brain's emotional systems can function independently and often override the cortex to influence decision-making. Marketers are well aware of this ability to manipulate decisions by hijacking people's emotions. In fact, fMRI neuroimagery demonstrates that when evaluating brands, consumers primarily use emotions rather than information (Damasio, 2005). *Logos* refers to the logical proof of an argument (Bracet, 1992).

While all three aspects of persuasion are important for a good argument, *pathos* through its ability to influence judgment is the most powerful form of persuasion (Bracet, 1992). Individuals can easily overlook a lack of *logos* and *ethos* in an argument secondary to a strong *pathos* effect (Bracet, 1992). This is why emotionally charged anecdotes can have profound effects on the listener's opinions.

The appeal of the CAM *ethos* arises from its association with exoticism – whether it is ancient Oriental wisdom or the sagacity of the natives found across the globe (Teal, 2014). An analysis of CAM marketing campaigns has revealed that it specifically targets the *ethos* and *pathos* (Widder & Anderson, 2014). Furthermore, the *ethos* of the label "science" legitimizes CAM just as much as it does biomedicine – therapies are given names as "psychic science", "chiropractic science", and "homeopathic science" which in the eyes of its practitioners and patients are credible with moral authority and legitimating power (Kaptchuk & Eisenberg, 1998). The language of this "science" of CAM is "one of solidarity, unity, and holism instead of the distant, statistical, and neutral conventions of normative science." (Kaptchuk & Eisenberg, 1998) Even labels assigned by alternative practitioners to include 'allopathic' versus 'homeopathic' versus 'naturopathic' gives the impression of equivalency to the layperson; that they may choose between different but equally effective approaches. These tactics are used to enhance the *logos* of CAM, as expounded in infomercials, advertorials, or celebrity endorsements (Widder & Anderson, 2014).

Moreover, CAM magnifies its appeal by highlighting the weaknesses of biomedicine (Widder & Anderson, 2014). According to Willard (2005), CAM has built its rhetoric to appeal specifically to spiritual, educated women (the primary users of CAM) by constructing an anti-biomedicine ideology with four main features or diversionary tactics. These are profit-mongering (Big Pharma), the doctor as a deity, illness as war, and the body as a machine. This rhetoric stresses personal empowerment, egalitarian relationships, and medical knowledge based on one's bodily experiences (Widder & Anderson, 2014) & (Willard, 2005).

By targeting biomedicine where there is indeed room for improvement, CAM rhetoric denigrates its *ethos*. In doing so, it moralizes healing and bifurcates treatment (Willard, 2005). And in this bifurcation, "biomedicine is a cold, disjointed, toxic, 'evil' and unnatural force of technology in contrast to a more natural, holistic, pure, good, and balance-driven force for unity that seeks to create conditions of health instead of merely treating specific pathologies" (Widder & Anderson, 2014). These arguments are bolstered by the *pathos* of anecdotal evidence and personal stories to demonstrate efficacy, reinforcing in their customers, a sense of control and empowerment by reiterating notions of 'you know your body best' (as opposed to a doctor or other medical professional).

I. Big-Pharma

The case of *'Big Pharma'* is a complicated debate. It is indisputable that the cost of medications is high; publication bias in the industry favors only positive results while disregarding important negative findings; funding of clinical trials and undeclared conflicts of interest often do not work in the best interest of the patient (Widder & Anderson, 2014). However, many have exaggerated these shortcomings to the extent where anything set forth by pharmaceutical companies is *Big Pharma's* attempt at profiteering at the consumer's fatal cost, such as vaccinations being erroneously linked to not only autism but also shaken-baby syndrome (Widder & Anderson, 2014). Such an attack undermines the *ethos* of biomedicine and promotes suspicion of pharmaceutical products portraying the system as deceitful and nefarious. This stands in stark contrast with CAM's affable and innocuous natural approach.

II. Physician's God-Complex

Historically, doctors, having endured an arduous medical training were viewed as the best source of medical knowledge. By using the 'doctor as a god' metaphor, CAM creates this misperception in the general public that physicians believe they have greater insight into a patient's body than the patient themselves (Willard, 2005). The traditional medical view sets up a patriarchal and hierarchal system where the patient is passive and reliant upon the doctor for treatment to the point of "addiction" to their dictates (Willard, 2005). This is especially targeted to irk the beliefs of an educated, spiritual audience habituated in seeking their own answers to questions and making educated decisions based on those answers (Willard, 2005). CAM is then able to offer a more egalitarian relationship, emphasizing the patient's integral part of the healing process (Willard, 2005). In so doing, the

continued on page 16

physician's *ethos* is replaced by the patient's *ethos* while the physician's esoteric scientific *logos* is supplanted with the patient's natural *logos* (Widder & Anderson, 2014). By establishing traits valued by the spiritual community (nurture, empathy, caring, listening, collaboration, and self-sufficiency), the result is a powerful appeal to *pathos* (Willard, 2005). To augment this division further, any calls for evidence and proof for CAM's efficacy by scientists is unfairly depicted to perpetuate this 'god-complex' stereotype of the all-knowing physician (Widder & Anderson, 2014).

III. Illness as War

In 1971 former president Richard Nixon declared war on cancer in his state of the union address (Brickley, 2003). While such metaphors are intended to be just that, CAM proponents twist the metaphor to create a fear of medications – just as weapons can be dangerous and backfire on the user, medicines cause harm and provoke more aggressive tactics from the "enemy" (Willard, 2005). The counterargument is that pain is natural. Pain should not be fought; instead it should serve as a messenger that offers insights about behaviors and lifestyle habits that produce it in the first place (Willard, 2005). While this sounds poetic, it is the kind of linguistic style mirrored in spiritual texts, where notions of 'trials' and 'difficult times' are seen as events that strengthen faith. Again, when biomedicine demands evidence acceptable to its standards, it preserves its image as one of a militaristic aggressor (Widder & Anderson, 2014).

IV. Biomedical Model

The origin of the notion of 'body as a machine' can be traced to Descartes. According to him, the mind and the brain were different entities albeit related – a metaphysical stance. He believed that the body was subject to mechanical laws; however, the mind was not. Modern biology explains the mind as an emergent property of the organized nervous system (Lock & Gordon, 1988). Before its advent, the prevalent orthodox Christian views of the mind-body relationship had greatly thwarted the development of medical science. Because human beings were spiritual beings, body and soul were considered one. Diseases were attributed to non-material forces such as personal or collective wrongdoing. It was also believed that for the soul to ascend to heaven, the human body had to be preserved intact, thus banishing human dissection (Mehta, 2011). Descartes' mind-body dualism, paved the way for progress in medical science through the study of anatomy and physiology.

However, as biomedicine has progressed from understanding disease not only as a biological entity but also having psychosocial determinants, the mind-body dichotomy is no longer a central tenet to the practice of medicine. In this context, CAM still portrays biomedicine as reliant on technology, treating separate parts of the body as if they were in isolation from the greater sum of those parts (Willard, 2005). Biomedicine thus seeks to control and quantify every variable, leading to over medicalization and overtreatment (Willard, 2005). For instance, Dean Ornish, who is a physician and founder of Preventive Medicine Research Institute in Sausalito, California as well as Clinical Professor of Medicine at the University of California, San Francisco, points to bypass surgery as an example. According to him, this surgery only temporarily fixes a plumbing problem. It does nothing to address the lifestyle or the totality of the problem of heart disease (Willard, 2005). While this is true, no physician maliciously dictates the lifestyle choices of any individual. People make their own choices, regardless of information to the contrary. The surgery actually buys them more time to (hopefully) implement those changes and make better choices. Further, the issue of choice, whether freedom of choice or choice architecture, is a broader social problem involving the political-socioeconomic complex. Undoubtedly, if an individual's place in the social structure (in terms of class, race, ethnicity, age or gender) restricts his or her choice, providing them merely with education to guide their choices towards a health-promoting behavior or stance is futile. In those cases, there are only two options: either to let these people experience the morbidity and mortality of the choices they have made (i.e. no surgery) or attempt to fix the problem and reduce the morbidity and mortality (i.e. surgery). So while Dean Ornish may be a well-meaning physician, his approach and criticism of biomedicine is idealistic and impractical. It would be great if we eliminated coronary artery disease, but biomedicine functions embedded within the same social fabric from which many of our 'modern' illnesses arise. It is therefore myopic and inaccurate to blame biomedicine for not having a cure for CAD.

Conclusions

Understanding the evolutionary and psychosocial context of the human brain and its function, combined with the results of various studies strongly suggest that the attractiveness of CAM lies in its appeal to communicate directly with intuition, which has been called the natural mode of information processing (Saher & Lindeman, 2005). CAM messages elicit familiar concepts such as 'naturalness',

continued on page 18

notion that one can thrive instead of just hoping to survive, impacts the living experience of both patient and caregiver.

Conventional cancer therapeutic options include chemotherapy, radiation therapy, and surgical intervention. The integrative approach educates patients first - on the importance of proper nutrition to reduce the onset and recurrence of cancer including a discussion on herbs such as turmeric and curcumin, clove, ginger, garlic and others; the value of physical exercise in reducing recurrence of certain cancers including the benefits of yoga, tai chi, and qi gong as healthy approaches to stress management; and establishing a sense of spiritual wellness, with techniques such as mindfulness, meditation, art therapy, music therapy, and other modalities with evidence or good potential for benefit and low potential for harm. The integrative approach does not discount conventional remedies for acute benefit but rather complements them by supporting and optimizing a patient's mental, physical, and spiritual health and sense of wellness concurrently with conventional treatment through each step of the journey. Patients are also counseled on the current state of evidence for alternative therapies and discuss their fears about conventional medical approaches and other stressors which can help the patient, the healthcare team, and the caregiver find the approach that is informed by the best evidence and most importantly, best fits the patient's philosophy of life.

Back pain is another common condition we see. In the conventional model of care, back pain may be dealt with by obtaining a history of potential source of injury, physical examination, imaging +/- labs, anti-inflammatory medication and/or pain medication, and follow up. An integrative approach would include a "tool box" that adds the dimensions of manual medicine such as physical therapy (which is a complementary modality), osteopathic manipulation or chiropractic treatment, use of acupuncture as appropriate, herbal and natural therapeutic options such as curcumin and omega-3, guidance on yoga, meditation, tai chi, and massage among other options of care. Nutrition would be assessed and recommendations made to help reduce inflammation through dietary means. An integrative approach would also address the psychological aspects of pain, and the impact on the quality of life and spiritual wellness to address living with pain.

In considering its foundation, there is no recognized specialty of "complementary and alternative medicine" as a specific organized body, while integrative medicine, through leadership from the University of Arizona, the American Board of Integrative Holistic Medicine (AIHM) and the Academic Consortium for Integrative Medicine and Health, amongst others, has now received recognition from the American Board of Medical Specialties as a unique specialty with certification through the American Board of Integrative Medicine.[2] Specific requirements for fellowship training, a set foundational curriculum grounded in best evidence and best practices, and requirements for CME are established in a manner consistent with other conventional medical specialties. These allow providers from all specialties to learn tools that will help them to gain greater expertise in caring for the patient as a whole. This approach enhances our ability to share knowledge across specialties and domains and to build a stronger platform for consistent care, research, and education.

In fact, integrative medicine as defined by the AIHM suggests, "The field of integrative health and medicine reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and professions to achieve optimal health and healing. Simply put, integrative health and medicine offer best practices for optimal health and healing."[3]

The definition of family medicine is "the medical specialty which provides continuing, comprehensive health care for the individual and family. It is a specialty in breadth that integrates the biological, clinical and behavioral sciences. The scope of family medicine encompasses all ages, both sexes, each organ system and every disease entity."[4]

In family medicine we speak of the bio-psycho-social model of care while in integrative medicine we speak of dealing with the whole person, mind-body-spirit. While the current definition of family medicine emphasizes addressing components of illness, "prevent, understand, and manage illness"[3], integrative medicine emphasizes the importance of health first and medicine second as a conscious decision and message. If one wants to discuss the logic of different approaches of care then we have to compare and contrast terms such as healing and curing and most importantly, recognize that it is important to understand that the ultimate goal of what we do begins and ends with the patient in the context of family and community.

The rhetoric and approach to health care that limits medicine to the focus on illness is narrow in scope and incomplete in its ability to provide health and healing to an individual or to a community as a whole. The World Health Organization's definition of health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[5] This definition has not been amended since 1948. Both family and integrative medicine incorporate this fundamental definition as being central to their missions.

Family medicine has always been integrative. We are the foundation of primary care and as such have always worked with other healthcare specialists and have built bridges with providers of complementary modalities whose training may go beyond that of the conventional medicine including physical therapists, psychologists, midwives, doulas, chiropractors, osteopaths, acupuncturists, and others. We have always looked to current evidence to guide our patients when choosing modalities and approaches to care. We have

continued on page 19

similarity, personal experience and testimonials over abstract concepts and scientific principles and probabilities, and thus appeal to the intuitive segments of the human psyche (Pacini & Epstein, 1999). It is quite obvious that scientific information, which is central to the distinction between CAM and biomedicine, involves analysis that necessitates rational thinking. Studies have shown that rationality and rational thinking patterns are not associated with CAM use (Saher & Lindeman, 2005).

There is however, a vital role for biomedicine to play in minimizing the effects of CAM rhetoric on individuals. There are many reasons people may become more likely to fall prey to this oratory, these include (MacArtney & Wahlberg, 2014):

- Negative experiences or iatrogenic effects of biomedicine
- Poor doctor-patient relationships
- Perceived or actual ineffectiveness of treatments (particularly in chronic illnesses)

By ensuring that physicians are empowering patients and enabling them to establish control over their illness and body, we can mitigate the psychological reasons why individuals fall victim to CAM rhetoric. Moreover, the illness narrative plays a vital role in the process of medical decision-making. It is important to remember, "people's stories of their life figure prominently in the ways they seek to understand experiences of illness" (MacArtney & Wahlberg, 2014). In medicine, we tend to focus intently on the treatment of pathology. In doing so, we ignore how subjective realities tailor people's accounts. It can be challenging to think of illness from a subjective perspective, because the physician's scientific background has engrained in him a reflexive arc that explains disease in terms of physiology – but in doing so, he focuses only on the science and misses the art of medicine.

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always been integrative physicians although, due to current models of education and reimbursement, much of our focus has been on disease and illness in our interactions with patients.

Yet even the conventional health care models are recognizing the importance of health promotion and wellness. We are now creating team- based approaches which are integrative by design and integrated in shared care models. Patient centered medical homes are the current incarnation of this model that enable patients to receive the breadth and depth of care that will promote their health and wellness and reduce the burden of disease on the individual, family, and community. Is this not integrative medicine at its best? Is this not family medicine at its best?

The Institute of Medicine and the LCME have specifically noted that integrative medicine and complementary and alternative medicine should be included as a part of medical curriculums and at least 60 medical schools have specific mention of these as part of their curriculums.[6,7] Many major medical centers now have centers of integrative medicine that engage in education, research and patient care. The Department of Defense and the Veteran's Administration health systems have a fellowship in integrative medicine and recognize it as essential for the subset of the population they serve.[2]

Palliative care and hospice organizations have incorporated complementary modalities as a foundational pillar in their offerings for patients who are ailing with disease, have terminal illness, or are at the end of their lives. Multiple studies focusing on caregivers, caregiver stress and distress, and patient care support this and are too numerous to cite here. There is a volume of qualitative evidence and a growing volume of quantifiable evidence on nutrition, physical exercise, stress management, and spiritual wellness as being fundamental in the journey to both heal and cure illness and promote health and wellness. None of this is alternative. It is all complementary and one could argue that these are the fundamental and foundational components to focus on, and that disease management is the complementary piece.

After all, life and the living experience should not be the narrative of disease specific experiences and illness, but should be a journey that is grounded in health and wellness and a sense of contentment and peace. The promoters of health, wellness, and healing are focused on improving the living experience of individuals and to allay their suffering. The family physician and integrative physician are trained specifically to engage with patients and communities, combining the value of both. Value based care as we move forward is going to be about optimizing a patient's living experience and understanding that when people are content and at peace they are not stressed or distressed and are not fearing or seeking care unnecessarily. This is family and integrative medicine - combining the science and art of healing to help people achieve health, reduce suffering, and to live their lives with contentment and peace within themselves, their families, and their communities.

Endnotes

1 https://nccih.nih.gov/
2 http://www.abpsus.org/integrative-medicine-fellowships
3 https://www.aihm.org/about/what-is-integrative-medicine/
4 http://www.aafp.org/about/policies/all/family-medicine-definition.html
5 Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948
6 http://www.nationalacademies.org/hmd/~/media/Files/Activity%20Files/Quality/IntegrativeMe d/Health%20Professions%20Education%20and%20Integrative%20HealthCare.pdf
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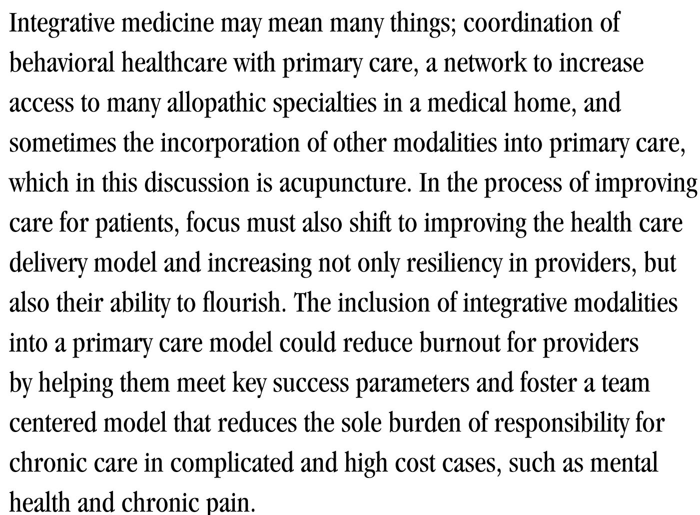
Incorporating Acupuncture into Primary Care

By Lisa Morrow, DNP, FNP, L.Ac



Integrative medicine may mean many things; coordination of behavioral healthcare with primary care, a network to increase access to many allopathic specialties in a medical home, and sometimes the incorporation of other modalities into primary care, which in this discussion is acupuncture. In the process of improving care for patients, focus must also shift to improving the health care delivery model and increasing not only resiliency in providers, but also their ability to flourish. The inclusion of integrative modalities into a primary care model could reduce burnout for providers by helping them meet key success parameters and foster a team centered model that reduces the sole burden of responsibility for chronic care in complicated and high cost cases, such as mental health and chronic pain.

Acupuncture has a lengthy history of treating everything from sprained ankles to the common cold to cancer. The Cochrane library offers meta-analyses of acupuncture studies organized by condition treated. Evidence supports acupuncture in the treatment of chronic pain, mediation of insulin resistance and alleviating pain associated with peripheral neuropathy and diminished peripheral circulation. Dysmenorrhea and migraine headaches have plentiful and rigorous evidence to support acupuncture treatment. There is increasing evidence to support the use of acupuncture in the care or patients with psychiatric illness such as schizophrenia, depression or anxiety.

When providers refer their patients for acupuncture there are a few usual questions: Will it work? Will it hurt? How often do patients need treatment and for how long? Will it be covered by insurance? What conditions are most improved with acupuncture therapy and what is the success rate for those conditions?

Just as medications are not the first or only solution to manage blood pressure, acupuncture is not the first line or correct modality for everyone. There are many classes of medications to treat blood pressure, and there are also many styles of acupuncture. If one acupuncture treatment style does not work initially, other acupuncture treatment options may be explored, and some styles do not emphasize painless insertion. Anecdotally, patients return at higher rates if they have a pain free experience. Patients are unique individuals and may need a different number of sessions over a different time period even if they suffer from similar ailments (i.e., sciatica secondary to multi- level degenerative disc disease in the lumbar spine). Generally, it is a good idea to offer more frequent sessions (weekly) at the start and space sessions out more (monthly) as patients improve.

Let's change the conversation surrounding acupuncture. What would help providers in a primary clinic? We can consider acupuncture as a modality in a toolbox (included with lab-work, imaging, pharmacotherapy, behavioral health) to help support patients with

mental health issues and chronic pain and address the higher cost of care. How can we offer positive reinforcements for patients to improve and be more functional in society?

There is a clear shortage in support for underdiagnosed primary care patients who suffer from depression, anxiety and other mental health imbalances. A 2013 study conducted in England showed significantly reduced depression ratings in patients 3 months after receiving acupuncture or counseling as compared to usual care (Macpherson, H. et al., 2013). Usual care is considered pharmacotherapeutics. Alternate options were offered to patients not interested in medication, for whom medication did not alleviate symptoms, and for patients concurrently using medication. A randomized controlled trial in Sweden that offered patients usual primary care, acupuncture or acupuncture and a salutogenic dialogue for treatment of symptoms relating to anxiety and depression found that acupuncture alone, or acupuncture with the salutogenic dialogue resulted in more improvement than usual care alone (Arvidsdotter, T., Marklund, B., Taft, C., 2014).

Chronic pain is one of the more frequent reasons behind patient visits to their primary care provider as well as to the emergency room. Pain management clinics require dexterity in interpersonal communication, teamwork and multi-system coordination, including both healthcare and body systems. Although there is significant evidence to support acupuncture interventions for chronic pain, and patients and providers alike are known to use adjunct modalities for pain, obstacles remain to referring patients for acupuncture. A study conducted in a managed care network in Oregon cited a deficit in communication between primary care providers and providers of adjunct therapies as an obstacle to more patients receiving acupuncture therapy (Penney, S. et al., 2016). Does this mean acupuncturists should be incorporated into medical homes so they can share electronic records? Perhaps this means that more access to training primary care providers in a subspecialty of acupuncture is necessary.

The Affordable Care Act also hopes to address healthcare costs. A 2014 retrospective analysis conducted at a teaching hospital in Boston identified a reduction of slightly more than 50% in primary care costs 12 months after a cohort of patients had received acupuncture (Highfield, E.S, et al., 2014). The cost of training to have one acupuncturist (treating 150 patient visits per month) on site per large practice should be offset in savings for chronic care, when compared to one hospital admission for one patient that could easily cost more than $100,000. When patients are seen more often, it is possible that emergency and hospital admissions can be avoided. Although outside the scope of this discussion, according to Russell J. Erickson, MD, there is also evidence that acupuncture provided to patients admitted to the hospital can also reduce cost.

Primary care providers may learn acupuncture skills to provide treatment for their regular panel through a variety of continuing medical education avenues. The path needed will vary based on provider past experience (e.g. martial arts, body work, meditation or self-cultivation practice). A master's degree in Chinese medicine at an accredited four year school (between $35-100,000 depending on the school), will prepare a provider to sit for the national board licensure exam by the National Certification Commission for Acupuncture and Oriental Medicine. There is also a six-month didactic path (roughly $10,000) to a different licensure for medical doctors (via the American Academy of Medical Acupuncture or American Board of Medical Acupuncture) which offer eligibility to sit for a different national board exam after the candidate has had two years of practical experience. Both accrediting bodies as well as individual practitioners offer a variety of courses and seminars which provide certification or continuing medical education credit. There is also a free, ten- day training for laypeople offered by the National Acupuncture and Detoxification Association on a five point protocol that has an evidence base both for and against its use. A primary care provider, as NP, PA, DO, or MD does not need additional

continued on next page

Mark Your Calendars

S M T W T F S

Upcoming Events

August 6-7
Summer Cluster
Inn on the Lake, Canandaigua, NY

September 17
Capital Region Family Medicine Conference
Siena College, Loudonville, NY

2017

January 25-29
Winter Weekend
Saratoga Springs, NY

March 11-12
Winter Cluster and Lobby Day
Renaissance Albany, Albany, NY

credentialing to practice acupuncture under their current license if they have received appropriate training. It is then considered within their scope of practice. The varying levels of additional training are also limited if the provider does not have a clinician who can give them practical supervision. An acupuncture session may be billed by a primary care provider as a routine visit as long as appropriate documentation for appropriate level of service is documented.

Another way to incorporate acupuncture into primary care would be to hire a licensed acupuncturist, though in some states (New York), acupuncturists can only be hired by other acupuncturists. Some managed care plans in California and Oregon cover acupuncture. In New York State, federal health insurance programs do not recognize acupuncture and do not reimburse for acupuncture procedures. Many private insurance companies cover acupuncture at varying rates (between $15-165 per session) depending on the plan, but may limit the number of yearly sessions. Other private insurances may define what they feel a session should cost, but do not reimburse. Often private practices that provide acupuncture charge $150-200 a session up front, and provide the paperwork for the patient to submit to the insurance company for reimbursement. In medically and socioeconomically underserved areas, this fee will make the practice unsustainable.

Successful acupuncture within primary care is measurable through many parameters. Primary care providers may feel more supported if their patients with multiple comorbidities are willing to return frequently for vitals and checking in. When patients receive weekly acupuncture, they present for more frequent monitoring and care management. As patients with limited social support have been shown to use more healthcare resources, this group may appreciate working more frequently with a team who expresses care for them, receiving positive reinforcement for improvements or encouragement if they are not improving.

In Europe, acupuncture is considered a medical specialty. Providers other than medical doctors are still legally allowed to provide acupuncture, similarly to the way a patient in the United States may receive body work from a licensed massage therapist, an osteopath, a physical therapist or other therapist with different background training. However, since acupuncture has the potential to support primary care, it should be a modality that is available in primary care practices. Primary care providers often strive to offer the best possible care for their patients, and acupuncture, as a non- invasive, pleasant clinic experience that improves patient relationships with clinic staff may improve healthcare for everyone involved.

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Chronic Pain: From Public Crisis to Integrative Relief

By Michael Spertus, MD and Pooja Amy Shah, MD

Pain as a Human Experience

Suffering from acute pain is a nearly universal experience, meant to alert the body to noxious stimuli from potential or actual tissue damage. Chronic pain is defined as pain lasting beyond the healing process, usually at least 3 months, and affects over 100 million Americans each year.[1,2] It is not a normal physiologic response unlike acute pain. This chronic pain can arise from chronically inflamed tissue sending constant nociceptive signals (via pain receptors), disruption of neural pain processing networks (central or parallel), or both. The exact mechanism giving rise to the chronic pain is generally multifactorial – it is usually impossible to identify one discrete cause.

Identifying pain in patients has become paramount, with pain becoming the "fifth vital sign."[3] (And who doesn't love the Wong-Baker Faces scale?) The focus on the mere presence of pain, especially beginning in the 1990s, has led to the current mainstream approach to pain in the United States, which focuses primarily on the physical component of pain and its treatment with medications, interventional procedures, and/or surgery. As most practitioners know, approaching pain from a singularly physical perspective using drugs as the mainstay of treatment has not been effective.[3,4]

Opioid medication overuse and abuse can also lead to the development of opioid tolerance, addiction and opioid-induced hyperalgesia.[5] The increase in the use, abuse, and overdose of opioid medication has become a topic of urgency in many spheres, including medicine, politics, and social media. The focus is twofold: many question the need or even desirability of treating pain so aggressively, and most medical practitioners agree that there is a dire need for alternatives to current treatment modalities.[6] A recent editorial by Dr. Abigail Zuger in the Well Blog of The New York Times illustrates the recent paradigm shift succinctly: "First we were zooming along in one direction: 'When Will Adequate Pain Treatment Be the Norm?', a 1995 editorial in The Journal of the American Medical Association demanded. Now we are inching along in the opposite way: 'Zero Pain is Not the Goal,' an editorial published in the same journal [recently] affirmed."[7]

Recently, the United States government and practitioners around the United States have been taking steps to address the serious adverse effects of opioid medication overuse, including the escalating rates of inadvertent overdoses from prescription opioids. In response to the growing public health crisis, the CDC released new guidelines aimed at primary care physicians, who are currently responsible for over half of the narcotic prescriptions given to patients.[8,9] Similarly, the Academic Consortium for Integrative Medicine and Health recently announced that their mission for the upcoming year is to address the crisis surrounding the evaluation and management of chronic pain. Given this current state, it is more important than ever to shift our focus on pain management away from narcotic use and unnecessary (and potentially harmful) surgeries and interventions.

The Integrative Medicine Approach

There is growing evidence regarding the importance of moving beyond the physical component of pain and avoiding focusing solely on pain elimination. It may be just as important, if not more, to consider the effects of chronic stress, cognition, spirituality, individual and cultural beliefs about pain, and gender to adequately address chronic pain. There is often concurrent

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fatigue, depression, anxiety, muscle tension, sleep disturbance, and/or social isolation in those who experience chronic pain, and often the effects are bidirectional – these co-factors can contribute to worsened perception of pain, and the worsened pain can contribute to worsened somatic symptoms. For example, depressed pain-free individuals are more than twice as likely to develop musculoskeletal pain as those who are not depressed.[10] A history of physical and/or sexual abuse has also been shown to predispose individuals to chronic pain. One study showed at least half of all sufferers of chronic pain experienced early abuse and another showed that over two-thirds of chronic pelvic pain sufferers experienced abuse.[11,12]

An integrative medicine approach to chronic pain is ideally suited to take into account all aspects of pain management, from the physical (pain scale), to the cognitive, behavioral, self-perceptual, and spiritual aspects. This approach will often include typical pain medications as part of the treatment process, but goes much further. The integrative approach begins at, or even before, the patient intake. It is necessary to consider that many patients seeking care will have already seen multiple providers for their pain and have tried many medications or procedures; they may feel disillusioned, isolated, and hopeless. Primary care physicians evaluating patients with chronic pain should explore the nature of the pain for the individual patient, help set appropriate goals, and work with the patient to develop a comprehensive pain management plan.[13]

Non-pharmacological Strategies for Pain Management

Primary care physicians evaluating patients with chronic pain would do well to learn non-pharmacological strategies as part of a comprehensive pain management plan. In doing so, providers can offer more flexibility to their patients, improving patient buy-in and adherence. Having additional tools in the physician toolbox for treating chronic pain also may help to alleviate provider burnout and disillusionment when working with chronic pain sufferers.

The list below provides examples of some of the better-studied integrative modalities for the treatment of chronic pain. It is not intended to provide an exhaustive list of all modalities available.

Mind-body Modalities

Mind-body medicine can be thought of as conditioning for the nervous system, just as aerobic exercise is conditioning for the heart. Modalities include traditional cognitive behavioral therapy (CBT), Mindfulness Based Stress Reduction (MBSR), meditation-guided imagery, biofeedback, hypnosis, and music therapy. A recent study published in JAMA demonstrated that CBT and MBSR were equally effective for relieving low back pain and were superior to usual care.[14]

Movement Therapies

There are many types of movement based therapies, including Yoga, Tai Chi, Qi Gong, other martial arts forms, and dance. Yoga and Tai Chi are perhaps the best studied. A meta-analysis from the American Pain Society suggested that yoga is useful for pain and disability related to several different forms of pain.[15] The American College of Rheumatology conditionally recommends tai chi for knee osteoarthritis.[16]

Nutrition

Research is increasingly demonstrating that chronic inflammation is the root cause of many chronic illnesses including pain. The widely-known "Mediterranean diet" and its related diets (such as the "Anti-inflammatory Diet") emphasize plant-based foods and also include olive oil, fish and other inflammation-reducing foods.[17]

Herbs, Botanicals and Supplements

There is increasing evidence that certain herbs and supplements such as capsaicin, ginger, turmeric, and fish oil have anti-inflammatory and pain-reducing properties. S-Adenosyl methionine (SAMe) has been found effective for osteoarthritis, while magnesium, butterbur, and feverfew have been shown to be effective for migraine prophylaxis.[18,19]

Acupuncture

The term "acupuncture" describes a family of procedures that have been practiced in China and other Asian countries for thousands of years. It involves the stimulation of points on the body using a variety of techniques, usually penetrating the skin with thin, solid, metallic needles that are manipulated by the hands or by electrical stimulation. Millions of Americans use acupuncture each year, often for chronic pain. Research is actively being pursued exploring the possible mechanisms for acupuncture's pain-relieving effects.[20]

Myofascial Techniques

Fascia is the biodynamic collagen structure of the body that can be thought of as a human's "soft skeleton." Recent research is now leading to an expanded recognition of the dynamic and energetic functions of fascia.[21] Various myofascial manipulation techniques have been developed to address chronic pain since the 1930s, starting with Dr. Ida Rolf. Since then, many comprehensive myofascial programs have been developed including trigger point injections, Anatomy Trains, Fascial Fitness, Fascial Stretch Therapy, Kinesis Myofascial Integration, and the MELT Method. Massage therapies (of which there are several types) also may offer significant relief for myofascial pain.

Manipulative Treatments

Spinal manipulative treatments mainly include Osteopathic Manipulative Treatment (OMT), also known as neuromusculoskeletal medicine (NMM), and chiropractic. Both involve treating various ailments, including chronic pain, using the hands to move muscles and joints via stretching, gentle pressure and resistance. Chiropractors comprise the largest alternative medical providers in the US, so chiropractic is more widely available than OMT (which is primarily performed by DO's). A Cochrane review found spinal manipulative therapies equivalent to usual care, PT and back school.[22]

Physical Therapy and Physical Medicine and Rehabilitation (PM&R)

Physical therapists guide patients through gradually increasing intensity of active exercises to directly address bodily pain. They also educate the patient about how brain and central nervous system hypersensitivity contribute to their chronic pain and provide home exercise programs for ongoing chronic pain management. PM&R physicians (physiatrists) can develop a comprehensive diagnostic and treatment plan that specifically focuses on improving function; they will often oversee PT, OT, orthoses, and non-surgical invasive procedures such as epidural steroid injections or implanted neurostimulators.

Concluding Remarks

With so many options, it is clear we have the tools to treat pain that go well beyond narcotic medications alone. Chronic pain patients can be some of the most challenging, and despite the options, it can be all too easy to rely on conventional therapies. In doing so, the rise in narcotic abuse will only worsen. To combat current trends, an integrative approach to pain is not just desirable, but necessary.

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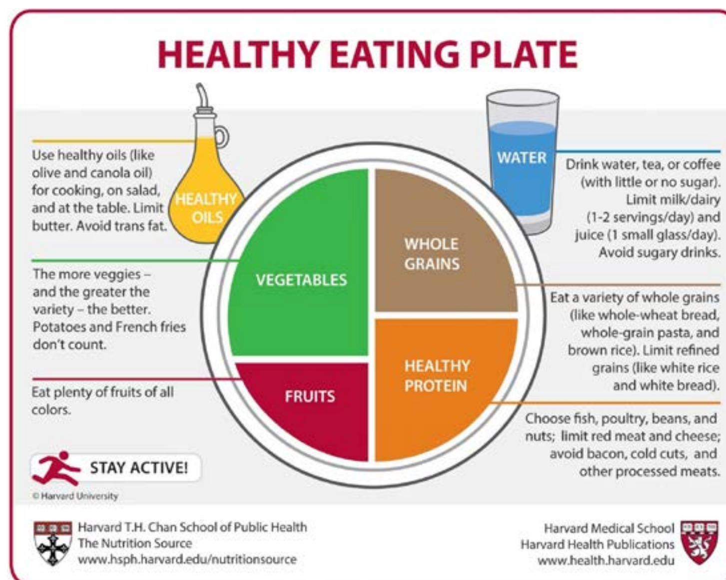
Integrative Nutrition

By Kaushal B. Nanavati MD, FAAFP, ABIHM and Benjamin Kim, BS

Nutrition is a hot topic these days and has been so for thousands of years. I love food and enjoy flavors, foods from different cultures, and have learned over the last two decades of clinical practice that nutrition is central to chronic health and chronic disease. Medical school curricula are limited in the amount of didactic and experiential exposure they provide to students when it comes to nutrition. While it is generally recognized that physician delivered counseling is a strong predictor for affecting behavior change in patients, only 32.6% of patients had received nutrition counseling in 2011 as noted in a representative study.[15]

The Healthy People 2020 objectives report that fewer than 1 in 3 adults and an even lower proportion of adolescents eat the recommended amount of vegetables each day.[1] Also a majority of adults (81.6%) and adolescents (81.8%) do not get the recommended amount of physical activity[1], though we'll save that for a separate article. Better nutrition could reduce the cost of heart disease, cancer, stroke, and diabetes by $71 billion dollars each year.[1] Diet and inactivity are the leading risk factors for deaths caused by heart disease, cancer, stroke, diabetes, chronic liver disease/cirrhosis, and high blood pressure and account for up to 310,000-580,000 deaths every year - similar to the number of deaths caused by tobacco and 13 times more than are caused by guns.[1]

Studies show the impact of dietary patterns on developing metabolic syndrome[12], sugar sweetened soda consumption and risk of developing rheumatoid arthritis[13], and the impact of soda on cell aging and telomere length[14]. Also as noted by the European Food Information Council when looking at major determinants of food choice, "The key driver for eating is of course hunger but what we choose to eat is not determined solely by physiological or nutritional needs. Some of the other factors that influence food choice include: Biological determinants such as hunger, appetite, and taste; Economic determinants such as cost, income, availability; Physical determinants such as access, education, skills (e.g. cooking) and time; Social determinants such as culture, family, peers and meal patterns; Psychological determinants such as mood, stress and guilt; Attitudes, beliefs and knowledge about food."[2]



So when we think about nutrition and what to recommend to patients, it is important to understand the factors that influence a person's food choices and those that impact the body's ability to act and react to foods, including food preparation. Ultimately it is important to recognize that when it comes to nutrition, there is not a one size fits all solution.

The Harvard Healthy Eating Plate and Healthy Eating pyramid are evidence guided resources that can aid providers in guiding patients to build a foundation for optimizing their nutrition.[3] From this foundation individuals can adjust their intake of certain components of the diet depending on their health conditions and individual needs in partnership with their health care team.

Vegetables:

When evaluating data from the Harvard-based Nurses' Health Study and Health Professionals Follow-up Study, it was noted that those individuals that averaged 8 or more servings of vegetable and fruit intake per day were 30% less likely to have a heart attack or stroke compared to those who had less than 1.5 servings per day. Within this, the green leafy vegetables, cruciferous vegetables, and citrus fruit specifically had an impact.[3] One serving of vegetables equates to one measuring cup of raw vegetables/salad greens or a half measuring cup of cooked vegetables.

The DASH (Dietary Approaches to Stop Hypertension) study and the now known DASH diet which emphasizes vegetables, fruit, low fat dairy, grain, poultry, seafood, and nuts while restricting saturated and total fat demonstrated a systolic blood pressure reduction of 11 mm Hg and a diastolic blood pressure reduction of 6 mm Hg.[4] A vegetarian diet was also noted to lower blood pressure.[5]

A meta-analysis published in the BMJ in 2014 revealed that higher consumption of fruits and vegetables was "significantly associated with a lower risk of all cause mortality…there was a threshold around five servings of fruits and vegetables a day."[6]

“Let food be thy medicine and let medicine be thy food” – Hippocrates

Certain fruits and vegetables such as leafy greens, cabbage, broccoli, garlic, onions, and fruits, may protect against some cancers including the mouth, throat, esophagus, stomach, voice box, and lung.[7] Also of note is that certain vitamins and nutrients may have benefit for cancer. Lycopene, which gives tomatoes their red hue, may reduce occurrence of prostate cancer. Carotenoid rich foods also may protect against lung, mouth and throat cancer.[7]

For diabetes there is good data from several studies showing reduced risk of type 2 diabetes with greater consumption of green leafy vegetables and whole fruits, specifically apples, grapes, and blueberries, though there is an increased risk associated with consumption of fruit juice.[8-10] Also, lutein and zeaxanthin show protective benefit against cataract and fruits and vegetables in general may help prevent cataract and macular degeneration.[16-20]

Whole Grains and Carbohydrates:

Whole grains such as brown rice, barley, rye, and oats are recommended over refined grains as the milling process can strip away nutrients and vitamins. With wheat, refining strips away >50% of the B vitamins, 90 percent of Vitamin E, and virtually all of the fiber.[21] Whole grain can also help lower cholesterol, may reduce clot formation, provide anti-cancer benefits due to phytoestrogens and essential minerals such as magnesium, selenium, and copper, and slow the breakdown of starch into glucose helping to maintain a steady blood sugar level and lower cholesterol.[21] When exploring food labels the most effective measure of healthfulness was a carbohydrate to fiber ration of less than 10:1.[21]

For health conditions, the quality of the carbohydrate may matter just as much as the quantity. Women who ate 2 or more servings of whole grain foods had a 30% less chance of dying from inflammation compared to those that rarely or never ate whole grain.[22] People eating 2.5 servings of whole-grain foods daily had a 21% less chance of cardiovascular disease compared to people eating less than 2 servings a week.[23] The risk of diabetes onset goes down by 21% or more when eating 2 extra servings of whole grain a day and replacing white rice with whole grain can lower diabetes risk by 36%.[24,25] Whole grains are known to prevent diverticulosis, constipation, and can offer a degree of protection against colon cancer that dietary fiber does not show.

Proteins and Dairy:

Protein is essential and the current recommendation from the Institute of Medicine is 0.36 grams of protein per pound of body weight. One serving of protein can consist of a third of a measuring cup of cooked beans or lentils, three ounces of fish, or a palm-sized serving of lean meat. Animal sources of protein have all of the amino acids we need while fruits, vegetables, grains, nuts and seeds may lack one or more, so for those with dietary restrictions of any type it is important to eat a variety of protein rich foods.[26] The Healthy Eating Plate mentions that the ‘protein package’ matters as certain high protein foods can be high in sodium while other may have higher fat content. Ham, for example, contains protein but also includes a lot of saturated fat and sodium. For this reason, beans, legumes, and lentils should be the primary source of protein in a healthy diet. While dairy can provide protein the evidence guided recommendation is 1-2 servings per day as excess intake of dairy has been linked to increased risk of prostate and possibly ovarian cancer. Also, foods such as bok choy, broccoli, leafy greens, beans and tofu can offer adequate calcium when consumed regularly.[38]

Eating even a small amount of red meat, especially processed, increases the risk of heart disease and stroke, “and the risk of dying from cardiovascular disease or any other cause”.[27-29] If all men and women in one study had cut their total red and processed meat consumption to less than ½ serving a day, 10% of cardiovascular deaths would have been prevented.[28] People who ate diets high in vegetable sources of fat and protein and were eating low carbohydrate diets had a 30% lower risk of heart disease. A study that noted the opposite effect followed Swedish women whose protein came from animal sources.[30] Red meat consumption increased the risk of diabetes, while substituting even 1 serving of red meat a day with nuts, whole grain or low fat dairy reduced the risk of developing type 2 diabetes by 16-35%.[31]Red meat and processed red meat consumption increase the risk of cancer death by 10% and 16% respectively for every additional serving per day. The bottom line with red and processed meats is to eat less of them and, if consumed, they should not be cooked on high heat as they form polycyclic aromatic hydrocarbons and heterocyclic amines that have been implicated in certain cancers.[32] Also, since protein digestion releases acids that are neutralized by calcium in the body, high protein diets require higher calcium and this can end up being pulled from the bone resulting in weaker bones, though data are mixed.[33-35] Further, for weight management, those that ate more red and processed meats tended to gain more weight compared to those who ate nuts, beans, chickpeas, lentils, or peas.[36-37]

Vitamins:

The literature on vitamins is controversial. The Healthy Eating Plate recommends taking a multivitamin to ‘top off’ anything that may be slightly deficient though they do emphasize that it is more important to try to optimize one’s meal regimen with a healthy food pattern. Also, mega-dose vitamins have potential for harm as with excess vitamin D (>10,000 units per day) and excess vitamin A impacting the liver, excess zinc suppressing the immune system, excess niacin leading to liver toxicity, jaundice, and glucose intolerance.[38] The goal

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with vitamins should be to get them from whole foods and natural sources such as sunlight for vitamin D and to use supplementation only as medically indicated.

The principles of nutrition in integrative medicine are consistent with those of conventional medicine, guided by current evidence as relates to eating whole unprocessed foods, maintaining a base of vegetables and adding whole unrefined, unprocessed grains as tolerated, protein from non- animal sources, limiting dairy, and drinking water, or coffee/tea without sugar while avoiding sugary drinks. Harvard's Healthy Eating Plate diagram provides a visual representation of our current understanding of how a typical meal plate should be proportioned. The frequency and quantity of meals one eats is important but of far more importance is the quality of what is actually consumed. A healthy diet along with regular physical activity can be effective in preventing many of the chronic diseases that plague the modern world.

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The Paleo Diet as a Therapeutic Tool

By Ann Carey Tobin, MD, FAAFP

Integrative, functional and holistic medicine all consider good nutrition to be a foundational, if not the keystone, therapeutic modality that supports optimal health and well being. Generally, the dietary approach most touted is one that is plant based and composed largely of whole foods. Even when guided by these two fundamental principles it is still possible to be overwhelmed and confused by the variety of diets recommended by the experts, or self-proclaimed experts. Nearly everyone I engage with professionally wants to know what diet will support their health and longevity, improve energy, assist in weight loss/management, abolish chronic symptoms and/or eliminate disease. Is it vegan, vegetarian, flexitarian, pescartarian, Mediterranean, macrobiotic, raw, gluten-free, low carbohydrate, low fat, low acid, alkaline, calorie restricted, or some creative combination?

The diet I most frequently recommend, as an effective therapeutic tool, is one that I call a common sense, modified paleo elimination diet. It encompasses the basic tenets of a paleo diet: whole foods, abundant plants, healthy fats, lean proteins, and no grains, dairy, legumes or processed, refined carbohydrates, including sources of simple sugars. To be more specific, this diet encourages plenty of vegetables, a moderate intake of whole fruits, lean range fed meats, fish, eggs, nuts, seeds, nut/seed butters, and other healthy fats–such as olive oil, coconut oil, and avocado. Refined oils are not allowed. No legumes means no beans, peas, soy or peanuts; and yes, oats, rice and quinoa are included in the no grains prohibition. The diet does eliminate potatoes, but many advocates allow sweet potatoes. Salt should be greatly reduced. Finally–alcohol is a processed, refined carbohydrate and, therefore, should be used judiciously.

The paleo diet, or Paleolithic diet, was first introduced in the 1975 book, *The Stone Age Diet*[1], and later popularized by Loren Cordain, PhD in his 2002 book (revised and updated in 2011), *The Paleo Diet*.[2] This is a lifestyle diet that has steadily gained in popularity. Unlike many popular diet books, this one morphed into a movement; and, like many movements, it has generated various adulterated interpretations and some confusion regarding the intent of the original design. Dr. Cordain's area of research is evolutionary medicine. He bases his principles for this diet on the premise that our pre-agricultural (more than 10,000 years ago) ancestors did not have access to dairy (how do you milk a wild animal?); they rarely consumed grains--considered "starvation food at best"; they did not salt their food; there were no refined sugars, although honey might be a rare treat; the diet was high in protein obtained from wild, lean animal foods; most of the carbohydrates consumed were non-starchy wild fruits and vegetables, resulting in a high fiber intake; and fats in the diet consisted mainly of monounsaturated and polyunsaturated fats—including the omega 3 essential fatty acids. Other researchers contend that the paleo proponents are off base with some of the principals in their gospel.[3-5] This may be true, but in my experience, this does not negate the fact that a sensible approach to the paleo diet is a healthy diet that is well tolerated, and can serve as a useful therapeutic tool to improve health and combat illness.[6] Albeit, one that can be a challenge for individuals invested in the standard American diet (SAD).[7,8]

The first axiom is to avoid dairy. Milk from any species is designed to meet the needs of the young animal. It is filled with species-specific nutrients that help the mammalian infant to grow, prime the immune system, and ward off disease. Cow's milk, meant to encourage rapid growth of the helpless calf, in the modern era is often spiked with extra hormones, antibiotics, and pesticides. It is also replete with natural, but concerning, bovine hormones, such as estrogen, insulin, insulin like growth factor 1, and betacellulin.[9-11] In modern dairy farming the omega-3 rich diet of grass may be supplanted with the omega-6 heavy diet of corn and other grains, altering the nutritional profile. Evidence is mounting that dairy protein consumption is linked to several chronic diseases.[12] Allergic and food sensitivity reactions to milk proteins, and lactose intolerance are among the most common food-related ailments. Avid consumption of dairy can usurp the healthier, more nutrient dense foods in a healthy diet, while also exposing the individual to the extra calories and increased saturated fats found in the high fat varieties. Yes, dairy is a source of calcium, but evidence does not support the contention that calcium from dairy serves to prevent osteoporosis.[13] For all these reasons I

continued next page

find that a dairy-free trial can be an extremely profitable venture. There are individuals who enjoy dairy without experiencing adverse effects; and, others who successfully incorporate goat, sheep or organic raw cow's milk into a balanced regimen. Hence, one of reasons to tailor the paleo diet is to serve as an elimination diet for those who want to expand their food palate at the end of the trial.

The admonishment to avoid all grains is rooted in concerns over the effects of specific proteins on the immune system, such as gluten and hybridized wheat proteins, and "anti-nutrients", such as phytates and lectins.[14-17] In addition, grains are a significant source of omega-6 essential fatty acids.[18] The majority of grains in the modern SAD are refined and processed (e.g. bread, pasta, cereal, many snacks), resulting in less nutrient dense intake (including less fiber), and a negative impact on the glycemic load. Removal of all grains in an elimination diet will help determine if an individual suffers from a sensitivity to certain components in grains, possibly help to address an omega 6 to omega 3 imbalance, remove unnecessary low nutrient-dense calories, and hopefully redirect the individual to explore more beneficial whole food alternatives. The ingestion of legumes raises similar concerns for the paleo aficionado. In this case it is non-digestible lectin proteins that increase intestinal permeability and impair immune function. Balance is truly the key here, as whole grains and legumes in moderation may serve to support a healthy diet, if an individual determines these foods are well tolerated.

This article does not need to review the hazards of sugar intake. Research studies have thoroughly documented the pro-inflammatory and disease promoting effects of sugar.[19] Sugar and the processed, refined carbohydrates that behave like refined sugar, play a major role in the development of insulin resistance, metabolic syndrome and associated diseases.[20] Likewise, the negative role of excessive salt in the diet is well established.[21] And, there is no doubt that including abundant fruits and vegetables in the human diet provides many benefits. For a paleo fan this food group will emphasize non-starchy varieties, full of phytonutrients and fiber, which will be digested and absorbed slowly. I tell my patients that I consider my rendition of the paleo diet to be a plant-centered diet, where at least half the plate consists of a variety of plants, predominantly vegetables.

The remainder of the plate is composed of lean proteins, and healthy fats in moderation. A true paleo diet touts the benefits of obtaining lean protein from wild game, animals fed their natural diet, organ meats, wild caught fish, shellfish, and range fed eggs. It does not support the consumption of marbled steaks, bacon and other processed meats, which are high in palmitic acid, one of the saturated fats that will elevate cholesterol.[22] The other is myristic fatty acid, which is paired with palmitic acid in high fat dairy products, including butter, cheese, cream, and whole milk products. In the modern era, it is also wise to limit animal fat as it harbors higher concentrations of antibiotics, hormones, and pesticides and herbicides found in the feed. Healthy polyunsaturated and monounsaturated fats found in nuts, seeds, avocado, olives, and oils from olives, avocado, walnuts, and flaxseed, round out that plate. My "common sense" approach refers to my assessment that we do not know enough, yet, regarding the effects of red meat. Even organic, grass-finished and humanely raised beef contain significant amounts of heme and carnitine in their meat.[23-25] There is concern that these natural attributes may possess some risk when consumed in large amounts. In addition, meat cooked at high temperatures, most notably with grilling, results in the production of cancer-causing heterocyclic amines and polycyclic aromatic hydrocarbons.[26,27] My recommendation is to not subscribe to the "cave-man" mentality exhibited by some enthusiasts who follow this diet, but rather, limit red meat intake to only a few times per month, or less.

A 2013-2014 survey of adults living in the United States found that the age-adjusted prevalence of obesity was 35.0% in men and 40.4% in women.[28] It is essential that health care providers are equipped to confidently navigate the world of healthy eating to help patients achieve, and maintain, healthy body weight. Relevant literature and postings on the paleo diet are replete with glowing, although unscientific, testimonials. I can also attest to the fact that patients in my practice who follow this diet are satiated, and lose weight without counting calories. The paleo diet is not shy in its recommendation to consume more lean protein; and, one reason given for weight loss with this diet is the higher dietary-induced thermogenesis of protein versus fat and carbohydrates. In addition, protein satisfies hunger more effectively than carbohydrate or fat, reduces hunger between meals, and may improve insulin sensitivity.[29-31] The added fiber of vegetables and fruits may also assist in satiety.[32] Consuming adequate high quality calories prevents the body from reverting to starvation mode—a metabolically more efficient state in which the brain-body inadvertently sabatoges the dieter's best efforts through metabolic slowdown.[33] Be aware, though, that an individual will be at risk for falling short of his weight loss goal if he fails to fill his plate with nutrient dense vegetables, over consumes nuts and other healthy fats, and indulges in processed "paleo junk food."

Many of us are already consuming paleo meals, without labeling it as such. Eggs or a breakfast smoothie with frozen fruit, almond milk, kale and nuts; a large salad at lunch with cubes of left over chicken, avocado, walnuts and a balsamic vinaigrette; a piece of wild caught fatty fish and two servings of vegetables, with a conscious effort to

skip the bread or rice in order to reduce unnecessary calories; a snack of apple slices dipped in almond butter. Even if an individual discovers that he cannot incorporate all of the principles of the diet, he will hopefully develop an appreciation for the benefits of whole foods, plants, and the limitation of processed/refined carbohydrates (sugar). The diet, though, is generally easily followed for at least the 4-8 week trial I recommend; and, the individual choosing to explore this healthy approach to eating will have access to considerable public media support networks to promote a successful journey.

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CAN EATING HIGH FAT IMPROVE HEALTH?

By Shree Mulay, MD and Joon Lee, MD

With the obesity/metabolic syndrome epidemic taking its toll, we are beginning to see a reversal of many of the dietary and nutritional recommendations that helped contribute to the increase in these problems. For example, the United States Department of Agriculture has reversed its position on egg yolks, now saying that we can eat the entire egg. This recommendation is consistent with the findings that limiting dietary cholesterol and fat intake has no correlation with preventing stroke and heart disease and in fact has a detrimental association with causing disease states like type II diabetes mellitus. In some cases, the exact opposite of previous recommendations are now being advocated as more healthy, beneficial, and less stressful, for instance, aerobic exercise at least three times weekly, if not daily vs. short bursts of intense interval training no more than three times per week. The surge of interest in the ketogenic (aka low carb, high fat) dietary approach is a good illustration of this changing outlook.

The ketogenic diet is a special high-fat diet that is often used for difficult to treat seizures. The early 1900s saw the formulation of the diet, initially used to help children and adults control and prevent seizures until the emergence of epilepsy drugs. In the mid-1990s, Hollywood producer Jim Abrahams established the Charlie Foundation as a means to share the beneficial effects of the ketogenic diet for people with epilepsy, other neurological disorders and select cancers. Used as a last resort for his difficult to control epilepsy, Abraham's son Charlie was able to improve his epilepsy and live seizure free by following the ketogenic diet.[1,15-21] Now off the diet, Charlie continues to live seizure free. With the wide coverage of his story and the expansion of the Charlie Foundation, more people continued to learn about the benefits of the ketogenic diet.

The ketogenic diet has been used to treat seizures, cancers, diabetes, and heart disease. Children with seizures from infancy through the teenage years may be helped by the diet. There is no way to predict beforehand whether it will be successful. Traditionally the diet has been used for children with myoclonic, atonic and tonic-clonic seizures. In every decade since the 1920's, studies consistently show that 50-75% of children with difficult to control seizures of all types are helped by the diet.[28]

The ketogenic diet is a dietary approach focused on decreasing blood glucose levels and consequently insulin release to increase the formation of ketone bodies, resulting in the body becoming keto-adapted. A body becomes keto-adapted after a period when blood ketone levels are elevated (and there have been no blood glucose surges) and the body uses ketone bodies as the primary fuel source. By decreasing dietary carbohydrate intake to less than 50g daily, and

less than 20g daily net carbs (carbohydrates minus fiber per serving), while increasing fat consumption, the fatty macronutrient context becomes 60-80% of the total dietary intake, which allows progression into a state of nutritional ketosis.[8-10]

Ketogenic diets with endogenous ketone production have been linked to a myriad of benefits including increased energy, improved mental clarity, triglyceride reductions, increased loss of body fat percentage (secondary to the protein sparing effects of ketones), increased insulin sensitivity and decreased basal insulin levels, with consequent reversal of metabolic syndrome and diabetes.[11-14]

Ketone bodies are three water-soluble molecules (e.g. acetoacetate, beta-hydroxybutyrate, and acetone [breakdown product]) produced by the liver from fatty acid oxidation. These ketones can be used by the body's cells as an energy source.[6,7] There are several ways to measure blood ketone levels. Measuring beta-hydroxybutyrate with a fingerstick blood ketone meter is the most accurate way to measure ketone bodies. A non-invasive and cheap alternative is to measure breath acetone concentration. Finally, urine detection strips only show excess excreted urinary acetoacetate but tell you nothing about the level of ketones in your bloodstream, are not as accurate, and may not work for some people.[22,23] While in ketosis, expected ketone levels are 0.5 to 3.0 mmol/liter when using a blood ketone meter.[22,23]

It is necessary to deplete all of the body glycogen stores (predominantly found in muscle and liver tissue) to get into ketosis. The body then seeks alternate metabolic pathways (i.e., burning ketone bodies) for energy.

A low carbohydrate (<50g daily intake and as low as <20g for some), high fat diet (>70 % macronutrients from fat) is critical to the ketogenic diet. Adding short bursts of intense exercise, extended fasts (as little as 24 hours with only water, tea, and coffee without additives like cream and sugar), and endogenous ketones – individually or combined – accelerates the process of entering into nutritional ketosis.[25-27] The important thing to remember is to eat food high in fat while avoiding food rich in carbohydrate such as bread, potatoes and insulinogenic fruit, like apples and bananas. There is no need to count the calories or to weigh the food with a ketogenic diet. One can eat until satisfied as long as he or she avoids consuming too many carbohydrates and proteins in a short time, which will block ketosis. There are also substitutes available for foods that contain carbohydrates. For example, wheat flour can be substituted with almond flour allowing a breakfast with almond flour waffles; regular ice cream can be replaced with coconut milk, avocado ice cream or low carb sorbet and so on.

Some supplements that can be consumed to facilitate ketosis include medium-chain triglycerides (MCT) and endogenous ketone esters.[2-5] The body readily absorbs and utilizes medium-chain triglycerides (MCT oil) as an energy source. MCT oils have no taste and are less likely to become stored as fat. They allow the consumption of more carbohydrates while maintaining ketosis. By directly consuming endogenous ketones one can promptly enter nutritional ketosis without having to deplete body glycogen stores. The two brands currently available to the public are KetoCaNa and Prüvit.

Consuming too much carbohydrate or protein in a single setting can cause a surge of insulin, driving the glycogenic and adipogenic pathways, with consequent replenished glycogen stores, increased blood glucose levels, and decreased ketones levels. One would likely drop out of nutritional ketosis, halting fat burning and storing consumed fat as adipose tissue. Careful control will need to be exercised when using the ketogenic diet to minimize the potential negative effects of "cheating".

Reaching nutritional ketosis can result in numerous health benefits such as increased energy, alertness, and mental clarity, as well as weight loss and other improvements in overall health.

The following websites are good resources for providers and patients:

http://keto-calculator.ankerl.com/

http://www.tasteaholics.com/keto-calculator/

http://dietdoctor.com

http://www.charliefoundation.org/

http://prototypenutrition.com/ketocana.html

http://pruvitnow.com/

The following websites are good resources for ketogenic ingredients and food lists:

http://www.dietdoctor.com/low-carb#advice

https://optimisingnutrition.com/2015/03/23/most-ketogenic-diet-foods/

http://www.holistichelp.net/blog/list-carbs-in-vegetables/

http://ketodietapp.com/Blog/post/2015/01/03/Keto-Diet-Food-List-What-to-Eat-and-Avoid

http://netplease.org/low-carb-cheat-sheet/

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Incoming President Robert Ostrander, MD

Thank you to all who have worked hard to make 2015-16 a great year for NYSAFP and for family physicians throughout New York– our board leadership and members, commissions, chapters and policy makers.

Many thanks to our 2015-16 president Tochi Iroku-Malize, MD, MPH, MBA, FAAFP, and a warm welcome to incoming president Robert Ostrander, MD, FAAFP.

Congratulations to 2016 award recipients:

Family Physician of the Year – William Klepack, MD
(pictured with outgoing President Tochi Iroku-Malize, MD)

Family Educator of the Year – Katherine Holmes, MD

Decreasing Wait Times in a Family Medicine Clinic – A Creative Approach

By Shilpa Darivemula; John Huppertz, PhD; and Elena Rosenbaum, MD, ABOIM

Introduction

Wait times, a key cause of patient dissatisfaction with clinic visits, are a key metric in healthcare quality improvement programs. This preliminary study assesses art-making as an intervention in the waiting room to minimize patient perceptions of wait times.[1,2]

Wait times significantly affect self-reported levels of patient satisfaction. In fact, patients who wait less than 5 minutes expressed 95.4 percent satisfaction with increasing wait times lowering that percentage.[9] Reducing wait time betters the quality of care perceived, and thus is integral in the discussion to improve healthcare business outcomes by hospitals and local clinics. Instead of removing wait times, current studies explore the process of transforming them into spaces of healing.[3-7,8]

Many studies of waiting room utilization in the medical community, especially family medicine clinics, describe interventions involving technology, such as televisions with health education programming.[9,10] Such passive programming has been proven to help with providing a simple and welcome distraction.[11] However, the waiting room is notorious for being a place of stress, anxiety, and tension—all of which are detrimental to the visit. Research on overcoming anxiety, stress, and tension suggests that outlets for self-expression through active distractions, improves not only mood, but also self-confidence, individuality, and self-expression.[12] This study aims to fill in a gap of evidence-based art interventions in waiting rooms, trying to connect the positive effects of art-therapy and art-making for patients as noted by many programs, with the needs of a functioning healthcare business. This study introduces active art-making activities in the waiting room of an Albany family practice clinic to measure its impact on patient satisfaction as well as to see how its introduction impacts the work flow of the clinic. Art intervention is a low-cost strategy that if proved efficacious can be fiscally useful for management of clinics and hospitals, empowering for the patients, and improving the overall patient-provider experience.

Methods

The study was conducted at Community Care Physicians, LLP over a 20-day period in June and July 2015. The practice offers a full range of services to a diverse inner-city Albany population. Two variables--Art-making and No Art-Making/Placebo Intervention—were given to patients over the 20 day period, with 10 days randomly dedicated to each variable. A study by Curry and Kasser found that university students found greater stress reduction with mandala coloring as opposed to unstructured art making activity.[12,13]

The art-making intervention consisted of a face pain scale (FPS ©) to measure baseline stress followed by a simple mandala with coloring pencils. The placebo, a word search for words such as "tranquil", "peace", "centered", served to provide a non-art activity to measure the therapeutic effect of art-making as opposed to other

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calming activities. A student investigator gained consent and provided a clipboard with each intervention upon approval. Beyond time in the waiting room, there is a second wait time in the exam room. We included this in the study, totaling two wait times for each patient. Four times are recorded for each patient: time of entrance into the waiting room, calling back to the exam room, time of nurse exit from the exam room, and time of the provider entering exam room.

When the patient leaves the encounter with the provider, the investigator asked these questions:

- How long was the wait time for today's visit?
- Is this wait time acceptable for you?
- Rate your level of satisfaction with the visit (1-low, 10-high)
- Rate your level of stress or anxiety using the Face Pain Scale.

Averages of wait times, perceived and actual, stress before and after were measured. Providers for each patient as well as patient satisfaction were also recorded. The SPSS data analysis ran both two way T tests and one-way T tests for independent variables.

Results

79 patients participated in the study over a 20 day period, with 33 total participants on the No-Art/Word search day and 46 participants on the Art/Mandala coloring day. All data was insignificant ($p>0.05$). However, raw data indicated certain trends.

Mean perceived wait time decreased in both interventions, with a higher decrease in the art-making intervention compared to the placebo activity (Figure 1).

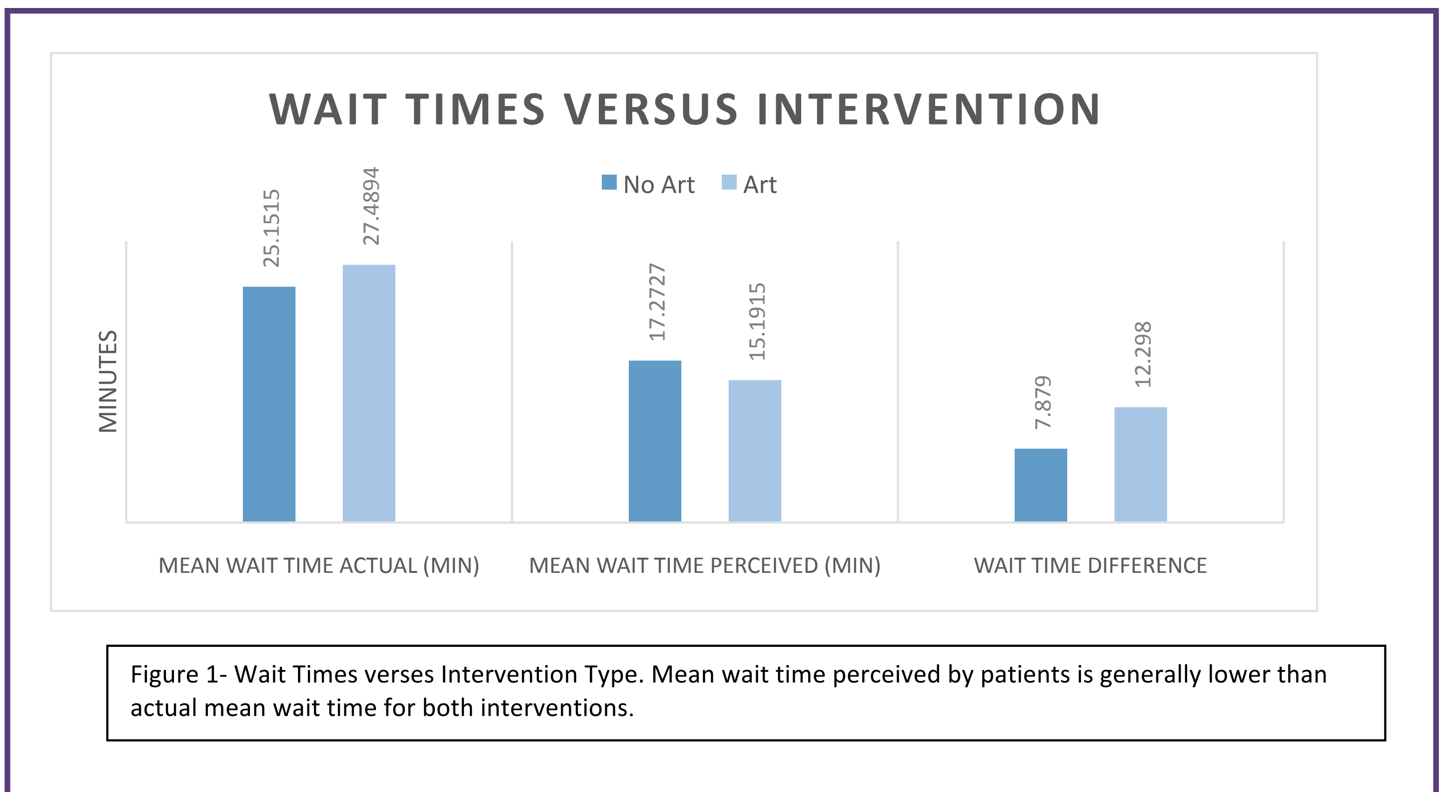

Figure 1- Wait Times verses Intervention Type. Mean wait time perceived by patients is generally lower than actual mean wait time for both interventions.

Stress levels before and after the intervention were recorded using the Face Pain Scale © (FPS) and averaged. Generally, mean post-intervention stress level decreased compared to pre-intervention level (Fig. 2). Mean difference in stress levels (mean stress before-mean stress after) was greater for Art versus No-Art.

Of the 79 total participants, 65 were female and 14 were male. More females participated in the art intervention than in the non-art intervention. Mean stress scores for pre-intervention and post-intervention for both art and non-art decreased for all races.

Conclusions

Despite the lack of significant data, two trends were noted. The first trend indicated that, while both interventions decreased perceived wait times, there was a larger decrease in wait time perception with the art intervention compared to the non-art intervention (Figure 1). The second trend noted the decreased difference in stress levels—the art intervention decreased overall stress levels of both genders and all races more than the non-art intervention (Figure 2).

The power of art-making is not in the quantitative data, but rather in the qualitative data. Conversations and comments made by both participants and providers further support the themes of patient empowerment and provider-patient connection. Patients were quick to share personal stories, advice, and opinions when approached to participate. For example, a pregnant patient requested coloring pencils for her intensely nervous husband who accompanied her while another patient revealed he lost his job and wanted to know if the colors he chose represented his internal emotions.

Art making crossed boundaries of language. An Iranian woman with a young daughter agreed to participate, despite having difficulty with the instructions. "I just moved here", she said. Due to a delay by the physician, the woman and her daughter waited over an hour to be seen. When asked her about her perceived wait time, she provided a completely colored mandala and stated that she felt that 20 minutes had passed by. "I used to make art when I was in Iran. I just came here a few days ago and I miss my family very much, which is why I say I have 10 level anxieties. I loved coloring in school" she said, and smiled.

Art also revealed internal judgments and perceptions of others. Another woman walked in with her head bent forward, a distorted neck and a twisted, paralyzed right hand. Unsure if she would be able to color, she was not approached. Instead, the patient requested to participate, stating, "I will use my left, non-dominant hand to do this project. It will take longer because I need to use one hand to pull out the colored pencils". When leaving, she said, "My stress level is still high. I am a high school science teacher and I love helping with projects like this. It is a good idea and keeps me calm. But I just got more bad news and now my stress level is worse". Not only did she share her emotions, but also a few details on her prognosis. Regardless of whether or not sharing such information is recommended, the openness and trust that formed through

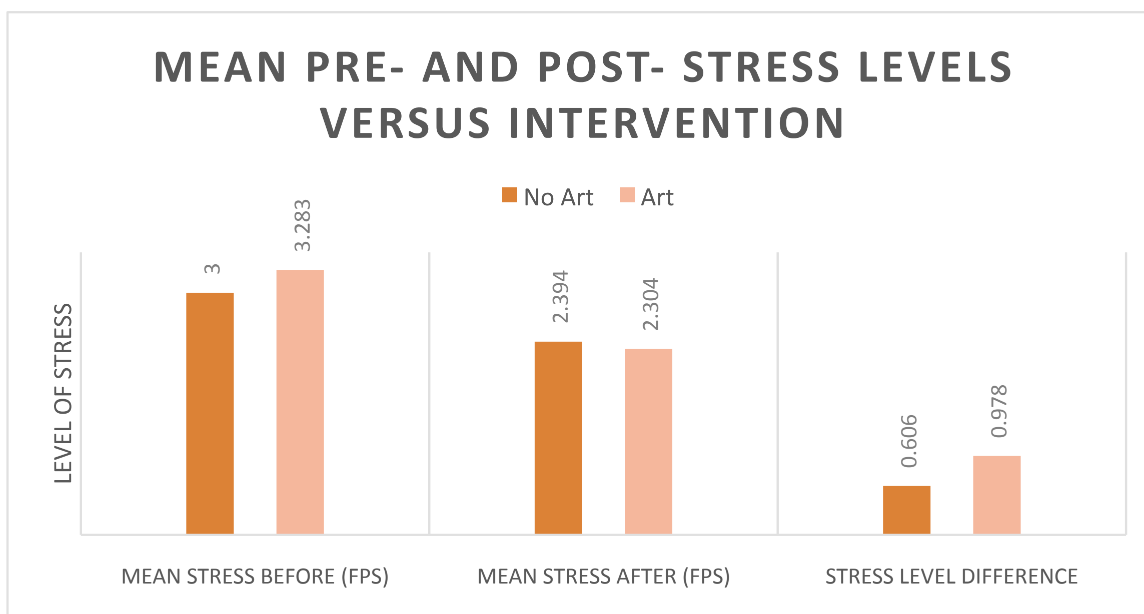

Figure 2 - Pre- and Post-Mean Stress Levels Versus Intervention Type. Mean post-stress level is generally lower than mean pre-stress level for both interventions.

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conversations with the investigator demonstrates the qualitative power of art-making as an intervention. Art, in its simplicity and accessibility, leveled the playing field and removed stereotyped judgments of ability.

Working with many sick individuals with little break may cause providers to become hardened to details, make stereotyped judgments, or to feel negatively—all signs of early burnout.[14] The art intervention helped to change the visit for both the patient and the provider. Apart from providing a positive distraction and being a novel conversation starter, the art making redirected the physician to the abilities rather than the disabilities of a patient. This seemingly small shift in perception echoed in the office, with the nurses making jokes and laughing with patients about their coloring skills and the doctors giving them space to color before starting their assessment. One doctor pretended to read the color schemes and judge patient stress to ease the tension in the room. One of the most impactful experiences, however, was the reaction of the physician to the paralyzed patient described above. The physician stated, "I think this art idea is good for the patients. I was not so sure before, but seeing her makes me think differently about her ability and illness". Art-making not only reduces the perception of wait times, but also improves attention to details, expands creativity, and connects the clinic with the patients to improve overall health outcomes.

Introducing art-making and coloring to a waiting room is simple and inexpensive. Place a stack of clipboards with attached boxes of colored pencils on the back. Leave a few simple sharpeners near the front desk, out of reach of young children. There are a variety of mandalas online that can be printed and added to the clipboards. Allow patients to color in the examination rooms as well, bringing their clipboards with them. Another idea is to start a program with medical students or local high school students to spend a few hours coloring in the waiting room with patients. Having students actively coloring sets an atmosphere of inclusion and community through art. Whatever is chosen, know that introducing art transforms not only the waiting room and levels of patient satisfaction, but also changes how patients connect with their providers and how they approach their healing encounter.

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Integrating MBSR in Primary Care

By Carla Podgurecki, MD

Mindfulness-Based Stress Reduction (MBSR) is a psychosocial intervention that consists of mindfulness meditation practice and gentle yoga stretches. Mindfulness is the cultivation of conscious awareness in the present moment in a non-judgmental manner. It is a method to turn off pervasive reactivity and replace it with conscious responses, and is practiced through formal meditation practices or through mental training (Carlson, 2005). The application of mindfulness based concepts and techniques is intended to target psychosocial processes potentially leading to a cascade of events culminating in improved systems, physiological processes, and quality of life. MBSR has demonstrated clinical benefits for a variety of medical conditions including chronic pain, stress, mood disturbance, fatigue, and blood pressure. These programs are relatively affordable, short term, and are typically in a group setting.

A controlled study involving women with cancer showed that MBSR indirectly improved blood pressure by reducing rumination. It is thought that rumination may prolong psychological and physiological arousal that accompanies stress, and the hemodynamic response to acute stressors plays a role in pathogenesis of hypertension and heart disease (Campbell, 2012).

In an uncontrolled study exploring the clinical effectiveness of MBSR as a self-regulating coping strategy for chronic pain patients who have not improved with traditional medical care, there were significant reductions in the mean total pain rating index. Using meditating for self- regulation helps patients teach themselves the *how* of living with chronic pain. This involves the patient focusing on the unpleasant sensation when it's present, and developing an attitude of detached observation toward the sensation. This does not reduce the sensitivity of pain, but is a refinement of awareness which in turn reduces the emotional and cognitive components of the pain experience (Jon Kabat-Zinn, 1982).

Research involving 63 cancer patients suggests that MBSR can have positive effects on sleep quality, fatigue levels, stress symptoms, and mood disturbances. Some people cannot use pharmacological sleep aides because of possible interference with their medications. It is unclear why sleep disturbances are common in cancer patients, but one theory is that the diagnosis is considered one of the most disturbing of stressful life events and stress affects sleep quality. In this study there was significant improvement in sleep quality with participants reporting sleeping longer.

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Fatigue also results from cancer treatment and can be persistent even one year after treatment. The treatment of choice for cancer related fatigue is exercise so it is thought that the yoga component of MBSR improves fatigue. It was observed that as patients became less fatigued they also became less stressed and moody. Improvements in mood were correlated with decreases in stress, but did not correlate with sleep improvement, which may suggest that MBSR helps improve sleep through stress reduction as opposed to improved mood (Carlson 2005).

A study involving 16 patients with social anxiety disorder (SAD) demonstrated that MBSR participants showed improvement in anxiety, depression, and self-esteem. This study was limited to breath-focused attention on sensation at the nostrils. MBSR-related reductions in negative emotion experience and SAD symptoms were correlated with changes in neural responses seen on fMRI during breath focused attention. The ability to redirect attention to thoughts, emotions, and physical sensations, a key feature of MBSR, may be an important skill for those with SAD to develop as it may enhance the efficacy of exposure therapy for SAD (Philippe, 2010).

It is important that a patient is informed about the details of an MBSR course before deciding to pursue it as it takes a lot of dedication to learn the discipline well. A mindfulness-based stress reduction program typically is about 8 weeks long, and takes place once a week in small groups or can be done online. Formal and informal meditation techniques are taught every week and include body scan meditation, sitting and walking meditation, mindful eating and hatha yoga. Participants are given meditation homework assignments to complete each week at home (Carlson, 2005). The classes are usually 2.5 hours long and typically there is a day-long silent retreat after the 6th week (Irving, 2009). There may be some minor variation with each course with respect to cost and time spent in each session but they all follow a similar curriculum. There are several resources a physician may use when referring a patient to MBSR. If the patient prefers a live course, an online search should result in local colleges offering MBSR as continuing education. Or, if desired, a patient can easily locate an online course. Finally, if these options aren't feasible, there are several centers that offer their services. The resources for all three options are below.

In conclusion, studies suggest that MBSR is efficacious for a broad range of conditions commonly seen in primary care, and would be a suitable treatment modality for those patients who have the aforementioned conditions. As positive outcomes in research continue to grow in this area of complementary medicine, MBSR in the primary care setting will continue to show promise.

Online Self- Guided Video Course: Cost $197.00
http://www.soundstrue.com/store/affiliates/cbcfmind/the-mbsr-online-course-3226.html

A list of centers that offer live MBSR courses and other mindfulness-based services:

http://www.mindful.org/resources/cat/mindfulness-centers-programs/

Recommended book written by Jon Kabat- Zinn, PhD, the founder of MBSR:

Full Catastrophe of Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness

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Integrative Pain Management with an Underserved Population

By Maureen Healy, LCSW, MPH, LMT; Lisa Morrow, DNP, FNP, L.Ac; Robert Simon, MD; and Patrick Masseo, MA

My doctor sent me here so I can keep getting my medications. Patients often tell us this when they first come to our pain management clinic. Many patients equate "pain management" with opiate medications, and are often confused, angry, and upset when asked to consider different treatments. When their doctor suggests weaning them off of opiates, or recommends adjunct or non-pharmacological treatments, they tell us *I'm being treated like an addict, like a criminal!*

Some patients have problems with addiction, some have been diverting their medications, and some have been using their medication as prescribed. All patients deserve respectful treatment. Often, their response indicates a need for education about chronic pain, rather than high risk behavior. This need is understandable, as chronic pain is a complex, multifactorial condition that providers and the medical community are still trying to understand.

According to the CDC, opioid prescriptions have quadrupled since 1999 and caused the deaths of over 165,000 people.[1] In March 2016, the CDC released "CDC Guideline for Prescribing Opioids for Chronic Pain." The report found no evidence of benefits of long-term opiate therapy, however evidence of harm includes increased risk of opioid abuse and dependence, overdose death, cardiovascular events, endocrinologic harm, and road trauma among drivers. Alternatively, adjunct therapies have been shown to safely improve functioning and reduce pain.[2-7]

In response to public health concerns of chronic opiate use and abuse, and the complexities of caring for patients with chronic pain, the Department of Family Medicine at Bronx-Lebanon Hospital Center developed an integrative, multidisciplinary approach to pain management. The Department of Family Medicine began providing pain management in May 2013, and completed over 5000 outpatient visits in 2015. The team includes pain medicine providers, a physical medicine and rehabilitation specialist, a licensed acupuncturist and doctor of clinical nursing practice, a doctor of osteopathy, two clinical social workers, a clinic manager, nursing staff and registrars.

Many patients served by the clinic have co-occurring health and mental health conditions, including substance abuse, which increase the risk of harm with opiate therapy. A majority of patients have an income below the federal poverty level and live in an underserved area, with poor access to adjunct therapies. By offering a range of conventional and "alternative" or "complementary" non-pharmacological treatments, along with patient education, the Department of Family Medicine is working to broaden the definition of pain management. We will describe the key elements that we believe have the potential to improve chronic pain care, and some of the challenges we have faced in developing our integrative model.

1. Changing the Paradigm: From Biomedical to Integrative

Most of us in the United States, patients and providers, are socialized to expect a biomedical and hierarchical model of care. We expect the doctor to have the "solution" and often it's in the form of a pill. Doctors also feel pressure to have the solution. In addition, we expect the doctor to focus on the physical signs and symptoms of disease. However, addressing chronic illnesses requires a broader approach. Patient motivation and self-care as well as social, psychological, spiritual, and environmental factors play a large role in health and treatment of chronic pain.[8]

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An integrative model is challenging to put into practice because it is often counter to patient and provider expectations. However, it has the potential to address the complexity of chronic pain beyond a biomedical focus on disease to whole person well-being. The goals of the integrative pain management program reflect this: first, to improve the patient's quality of life and functioning, as defined by the patient; second, to reduce and minimize the experience of pain. Framing it in this way broadens the focus of treatment to incorporate many interventions and to partner with the patient in their healing process.

2. Multidisciplinary, Comprehensive Assessment:

After seeing the pain medicine providers, every patient is referred to the clinical social worker and physical medicine and rehabilitation specialist. Using a biopsychosocial and patient-centered assessment, we draw a full picture of what is causing, exacerbating, and maintaining the pain, the consequences of living with chronic pain, barriers to recovery and healing, and the acceptability of treatment interventions. From the beginning, we discuss with patients the multifactorial nature of pain, the benefit of using a combination of treatments, and the importance of the patient's role in our team. With various perspectives, there is an opportunity to better assess for risks of abuse or addiction. Finally, the team approach focuses on our relationship with the patient to build trust.

3. Education:

All patients attend a pain management orientation with the clinical social worker. In a group setting, patients are given education about chronic pain and the treatment methods offered. They are encouraged to discuss self-management and communication skills with the provider, which can be difficult for some patients who are not used to taking an active role in their health. They are oriented to the American Chronic Pain Association website for a range of resources.[9]

The social worker addresses the epidemic of prescription opioid abuse within a public health framework, laying out the risks of opiate addiction, abuse, and death. They discuss the rationale for policies to monitor patients prescribed opiates, namely, to save lives and improve health. Many patients who have seen news reports are aware of the opioid abuse epidemic, and the group discussion helps patients understand that policies are not punitive, and are universally applied. We discuss our patient-provider agreement which is given to patients who are prescribed opiate pain medications or any controlled substances. PainEDU has samples of an agreement, including one written for patients with low literacy.[10] Although each doctor goes over the agreement with their patient individually, the orientation provides another opportunity for patients to discuss any of their concerns. We make sure patients understand that if they are concerned about addiction, we help refer them to substance abuse services and will continue to treat them.

4. Use of Adjunct Therapies:

Throughout, the pain management team discusses the uses and benefits of adjunct therapies for chronic pain, including conventional approaches such as physical therapy and alternative or complementary approaches, such as acupuncture. Although many of our patients use alternative practices, such as herbal remedies and spiritual practices, the evidence-base around these remains unclear. To choose which modalities to offer, we relied on evidence-based medicine and on the practicality of our provider resources trained to practice these treatments. For example, the doctor of clinical nursing practice is also a licensed acupuncturist who can offer primary care and pain medication management in addition to acupuncture. Our clinical social worker is able to use her training in mindfulness meditation and chair yoga in individual and group counseling. The following therapies are offered:

- Acupuncture
- Osteopathic Manipulative Treatment
- Physical Medicine and Rehabilitation:
  -Activity modification, Ergonomic evaluation, Strengthening exercises, Physical therapy referrals, Pain Management injections, Recommendations for pain medications and/or orthopedic surgical interventions
- Individual and Group Therapy:
  -Cognitive behavioral techniques, Mindfulness, Guided Imagery, Chair yoga, Referrals for social, vocational services and community support

5. Communication, Communication, Communication, and Teamwork:

The clinic manager is essential to the team by facilitating communication between the providers and with patients. Monthly meetings help us to grow team cohesiveness, address challenges and share successes. They provide opportunities to discuss and develop protocols. For example, patients sometimes question the need to see the clinical social worker or physical rehabilitation specialist as a part of the assessment, and even refuse. Oftentimes, referrals from the pain medicine provider to non-medical providers and for the orientation fell through the cracks. The team meetings helped us clarify our goals and rationale for using this model. As a result, the team is more committed to the comprehensive assessment model and has improved communication with patients, which has doubled patient participation in orientation sessions.

Patient and provider safety has also guided the development of our program. Clinic staff has experienced a few threats of violence while working with our patients, usually related to prescribing opiates. As a result, we quickly learned the importance of communication with patients and with each other. Consistently utilizing the pain management patient-provider agreement and explaining the team approach to patients has helped us to feel more confident and safe.

Both providers and patients benefit from direct access to the team afforded by working in the same clinic. Impromptu discussions of cases are normal and frequent, and providers can easily and quickly introduce patients to other members of the team to facilitate referrals.

6. Next Steps:

In addition to expanding the evidence-based therapies offered, we are considering the prevention of chronic pain. We are in the initial stages of collecting data to evaluate how this model impacts patients' opioid use and quality of life. Anecdotally, all providers are prescribing fewer opiates at lower dosages, and although we inevitably lose some patients coming solely for opiates, we have engaged many patients in treatment.

Beyond our services that are billable to insurance, the department supports our model. Provider schedules are full, suggesting that patients find our treatment plans useful. Further investigation will determine if this is a financially sustainable model, and if it can reduce health care costs in the future. We believe our model will improve outcomes and decrease many of the costs of chronic pain.

Chronic pain is not well understood, but advances in neuroscience have demonstrated that it is a "mind-body" condition with multiple targets for treatment.[11] Whole person, integrative, and multidisciplinary approaches to pain management are recommended as the standard of care.[8] These approaches address underlying physical, psychological, and behavioral issues, as well as the consequences of living with chronic pain. We can change and broaden the conversation of pain management using an integrative model of care, partnering with patients to encourage their active engagement and offer them evidence-based treatments.

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Moving Medicine into the Third Era: Creating Optimal Health and Well-Being

By Mark Nelson, MD, FACC, MPH

We are all aware of the physical, emotional, and financial challenges facing family physicians. As if 73,000 ICD codes weren't enough[1], the March issue of *Health Affairs* reported that U.S. physician practices spend more than $15.4 billion annually to report quality measures.[2] Under the new MACRA law, it is predicted that primary care practices with one to nine physicians (227,000 physicians nationwide) will face penalties of $579 million in 2019.[3] According to the Mayo Clinic, 63% of family medicine physicians reported at least one symptom of burnout in 2014 compared with 51.3% in 2011, and only 35% were satisfied with work-life balance.[4]

Even the Surgeon General recognizes the erosion of health and well-being for physicians, recently noting, "as I think about the emotional well-being for our country, I am particularly interested in how to cultivate emotional well-being for healthcare providers. If healthcare providers aren't well, it's hard for them to heal the people for whom they are caring."[5]

As described by Breslow (2006), we are currently in the second era of medicine: the era of chronic disease management. (The first era was communicable disease).[6] Our challenge today is to move medicine into the third era—creating health. For Breslow, the highest expression of complete health is to realize that health is a 'resource for living.' Similarly, the World Health Organization has for decades defined health as, "a state of complete physical, mental and *social well-being* and not merely the absence of disease or infirmity" (emphasis mine).[7]

Despite the label, our 'health care system' is actually a sick care and disease management system. It is about reacting to, treating, and managing disease. Empowering our patients to create health for themselves is simply not a priority. And while some physicians truly want their patients to be healthier, the system by and large doesn't support those efforts. Our health care system has become a 'fixing-people production line' that is more intent on micromanaging physicians than on empowering them to create health for themselves and their patients.[8] As Dr. Tait Shanafelt of the Mayo Clinic recently said, "American medicine is at a tipping point."[9]

Eight years ago—feeling increasingly alienated from my work—I took an honest look at myself and my life as a doctor and decided to make a change. For years I had rationalized my growing dissatisfaction with the bureaucratization of medicine and had made excuses for my unhappiness. Going to work was no longer something I looked forward to. I was chronically tired, stressed out, overweight, and unhealthy, all while telling my patients they should get healthy, eat less, and exercise more. Meeting Dr. Wayne Andersen (creator of the Take Shape For Life program[10]) around this time proved to be a critical step on my journey to help my patients improve their health. He not only articulated the vision of moving medicine into the third era by creating optimal health and well-being, but had created a methodology for doing so. The foundational pieces for this methodology are healthy fuelings that ensure predictable weight loss, a Habits of Health system[11] that guides people to a healthy mindset (to help them *think* differently), and the support of a health coach.

Implementing Take Shape For Life into my practice was simple and straightforward. I showed my patients what was possible and asked them a simple question: "*If I could help you lose weight and improve your health, and eliminate some of your medical problems and medications, would you be interested in exploring that?*"

An overwhelming majority of my patients desperately wanted to lose weight and get healthier. They were sick and tired of being sick and tired. Many were also surprised that their doctor actually asked them what they wanted, and offered to partner with them to achieve their personal health goals.

As a health coach through the program I discovered that I could practice third era medicine, teaching and empowering my patients to improve the fabric of their health and lives. I also knew that I could not guide my patients to health if I was not living a balanced, healthy life myself.

For health to truly be a 'resource for living,' three foundational pieces must be present:

1. Physical Health: More than the absence of disease, having energy and being in good physical shape. Being able to do the things we want to do in life. Being at a healthy weight, living a healthy lifestyle, including healthy nutrition, sleep and movement/activity.

2. Emotional and Mental Health: Being able to prioritize what is important to us, and to be in control of our response to stress, rather than choosing stress as our response. Becoming self-aware, being mindful of our thoughts and feelings and the world around us, thereby putting us in a position to choose what is best for us. Intentionally creating the time and space for ourselves to unplug, to relax, to be fully present for every moment rather than rushing through the moments and days of our life. Importantly, this enables us to move from reacting to the present, to creating our future.[12]

3. Financial Health: For us to be well in the world, financial health is required. This is not about a number; it is about the realization that sacrificing our life dollars for paper dollars erodes every aspect of our health and life. Financial health and security provides more than peace of mind; it can be the platform for a growth mindset—being open to possibilities, new endeavors and adventures.

Following this trilogy of optimal health and well-being as part of the Take Shape For Life program, I transformed my own health—losing weight and experiencing improvements in mood, energy, and appearance. I learned how to create a healthy mindset for myself, which has been the key to maintaining my weight over the last eight years. Without a healthy mind that prioritizes our health, a healthy waistline will not last. On the path to creating optimal health and well-being, losing weight is just the beginning.

Today I work hard, but with abundant energy and fulfillment, because I'm fully in control of my life. I'm healthier and happier than ever and in the best shape of my life, at a healthy weight and working out regularly. As a health coach I transformed my own health and continue to help others transform theirs.

We all know that overweight is the number one cause of preventable disease in America today.[13] The fear that this epidemic would decrease life expectancy is now supported by data from the Centers for Disease Control (CDC). "Age-adjusted death rates for the first 9 months of 2015 increased significantly compared with the same period in 2014, most notably involving causes of death related to obesity" (Ludwig/JAMA). We also know that by 2030, the number of Americans with three or more chronic diseases will grow to 83.4 million from 30.8 million in 2015.[14] Helping my patients lose weight while learning new choices and habits of health empowers them to create a healthy mindset. This mindset in turn allows patients to be their own change agent, taking more control of their health and improving the fabric of their life.

As a result of learning and practicing new healthy habits, including how to lose weight and keep it off, I have helped many people reduce their chronic disease burden by eliminating or ameliorating many diseases. As a result, many of them have also been able to reduce or discontinue the use of many medications. In essence, Take Shape For Life helps people get to a healthy (or healthier) baseline, creating the momentum in mind and body to move their health forward. For most patients, losing weight is the catalyst for creating long term health and well-being.

Today we are truly at a tipping point where physicians are increasingly tasked with meeting the needs of a cancerous bureaucracy that seems to be destroying the heart and soul of medicine. While waiting for the 'system' to change for the better, the Take Shape For Life program puts physicians in a position to create significant ancillary income outside of managed care (no ICD codes required) by helping their patients improve their health and well-being. In the simplest terms, we are paid to create health for our patients and in the process can create financial stability for our practice and balance in our own lives. I'm old-fashioned: I believe physicians have a right to be healthy, happy, and financially secure. We don't have to abandon medicine to accomplish that. We have the tools to practice on our own terms to help move medicine into the third era, and create health and well-being for ourselves and our patients.

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Dietary Supplements – What Patients Need to Know

What are dietary supplements?

Dietary supplements include such ingredients as vitamins, minerals, herbs, amino acids, and enzymes, and are marketed in forms such as tablets, capsules, softgels, gelcaps, powders, and liquids.

What are the benefits of dietary supplements?

Some supplements can help assure that you get enough of the vital substances the body needs to function; others may help reduce the risk of disease. But supplements should not replace complete meals which are necessary for a healthful diet.

Unlike drugs, supplements are not intended to treat, diagnose, prevent, or cure diseases. That means supplements should not make claims, such as "reduces pain" or "treats heart disease." Claims like these can only legitimately be made for drugs, not dietary supplements. Dietary Supplements can be beneficial to your health — but taking supplements can also involve health risks.

Who is responsible for the safety of dietary supplements?

The FDA is not authorized to review dietary supplement products for safety and effectiveness before they are marketed.

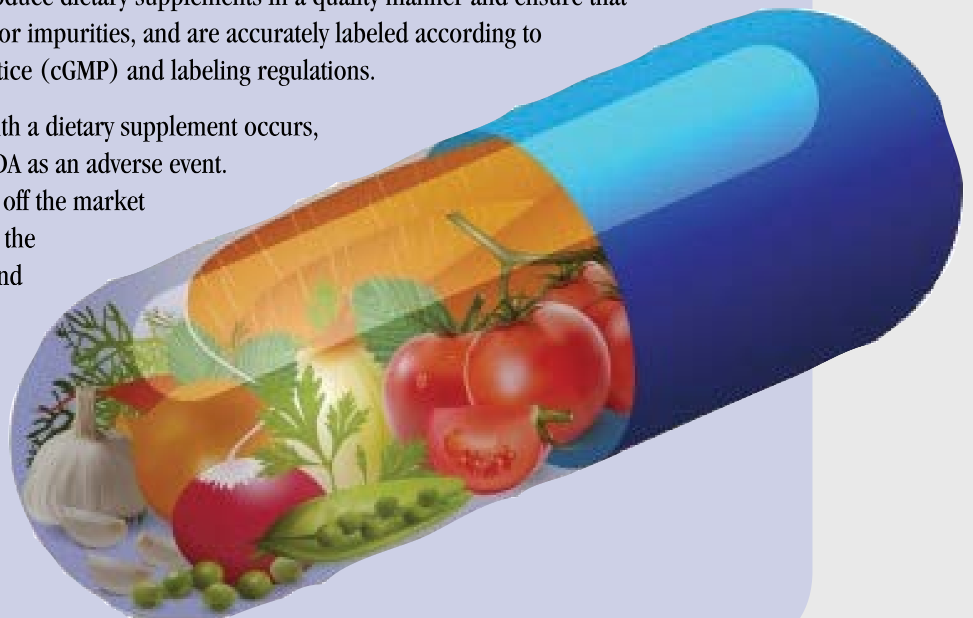
All prescription and non-prescription drugs are regulated in the United States by the Food and Drug Administration (FDA). But dietary supplements are treated more like special foods and aren't put through the same strict safety and effectiveness requirements that drugs are.

The manufacturers and distributors of dietary supplements are responsible for making sure their products are safe BEFORE they go to market. If the dietary supplement contains a NEW ingredient, manufacturers must notify FDA about that ingredient prior to marketing. However, the notification will only be reviewed by FDA (not approved) and only for safety, not effectiveness.

Manufacturers are required to produce dietary supplements in a quality manner and ensure that they do not contain contaminants or impurities, and are accurately labeled according to current Good Manufacturing Practice (cGMP) and labeling regulations.

If a serious problem associated with a dietary supplement occurs, manufacturers must report it to FDA as an adverse event. FDA can take dietary supplements off the market if they are found to be unsafe or if the claims on the products are false and misleading.

Excerpted from the FDA website - http://www.fda.gov/Food/DietarySupplements



CONGRATULATIONS TO OUR NEW YORK TAR WARS WINNERS:

First Place: Cooper Caccamise, age 9, Lindbergh Elementary School, Buffalo

Second Place: Lauren Bren, age 9, Big Cross Street School, Queensbury

Third Place: Caden Allen, age 10, Warrensburg Elementary School, Warrensburg

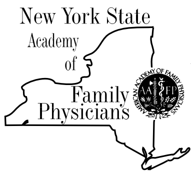
The Tar Wars program is a tobacco-free education program for fourth and fifth-grade students, designed to teach kids about the short-term, image based consequences of tobacco use and the advertising techniques used by the tobacco industry to market their products to youth. Implemented in classrooms by volunteers – family physicians, educators and other health care professionals – the program has been shown to be effective in increasing students' knowledge of and attitudes toward tobacco use and advertising. It is part of AAFP's comprehensive approach aimed at tobacco and nicotine education for all ages.

First Place

Second Place

Third Place

The 2016-2017 NYSAFP Board of Directors with AAFP President, Wanda Filer, MD at the 2016 Congress of Delegates



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