HAWAII MEDICAL JOURNAL

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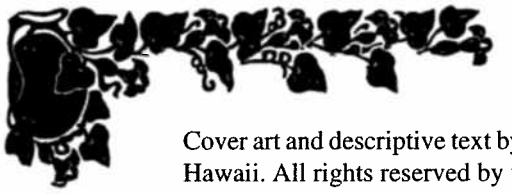
Contents



Cover art and descriptive text by Dietrich Varez, Volcano, Hawaii. All rights reserved by the artist.

Ē Opihi Ē

Depicting the dangerous business of gathering the Hawaiian delicacy. The opihi is Hawaii's caviar and lives only in the most dangerous surf.

Editorial

Norman Goldstein MD
Editor, Hawaii Medical Journal

"The Missing Lover"

"Kīpahulu", title of the Cover Art for last September 1998, depicts a legend of two lovers in the Kīpahulu district on Maui.

When I first looked at this very Hawaiian block print, typical of our covers by Dietrich Varez, I saw a possible lover to the left of the waterfall.

Then, when several of our readers also asked about the second lover, I was not sure of the location of the mysterious visage.

Recently, Varez has edified us by explaining there is a second lover -- but not visible. Only a voice was heard, so said the legend.

Mahalo, Dietrich, for perpetuating Hawaii mythology on the covers of our journal.

February is the Month for Lovers

An interesting article[1] by New York Times syndicated columnist, Jan Sheehan, says "Love is the Drug that Keeps Many Healthy". She reports on studies linking love; in another study, it was found that participants who reported being in love have high levels of euphoria-producing, pain-reducing endorphins (and no side effects from overdose - Ed.)

Our Poet Laureate, Dr. Robert Flowers' poetry and prose have appeared in the journal for many years, but his poems, "Mother of My Children", "More Beautiful", "Who Are You, Woman", and "Lovers and Friends" are most appropriate for February.

1. Sheehan, Jan. Love is the Drug that Keeps Many Healthy. Honolulu Star-Bulletin p.3 Feb 4, 1997.

This Month in the Journal

Janet Onopa MD of the Department of Medicine, University of Hawaii, presents an excellent review of CAM, complementary and alternative medicine in this issue. Because of patient interest in CAM, especially here in Hawaii, the Hawaii Medical Journal is planning a special issue dealing with "non-allopathic" medicine or CAM.

The Manuscript by medical residents, Sandi Kwee MD and Leilani Ka'anehe MD on "Occupational exposures and knowledge of universal precautions among medical students" emphasizes common exposures to blood among medical students and should be of interest to all physicians.

LOVERS AND FRIENDS

by Robert S. Flowers For my wife

How gently
How gently
You walked upon the stage
Of my presence
And eclipsed the memories
Of my past

How silently
How silently
Your soul whispered
Into the ear
Of my despair
Sighs of hope
Sounds of sustenance

How sweetly
How sweetly
You sang to me
Songs of friendship
And the suggestion
Of something more
Something yet
To be defined

How softly
How softly
You touched my skin
You touched my heart
And you touched my life

How solemnly
How solemnly
We shared our sorrows
Our aloneness
And talked of tribulations

How reverently
How reverently
We shared our hymns
We shared our faith
And shared our prayers

How joyfully
How joyfully
We stood before our peers
And stood before
Our Lord
And spoke our vows

How powerfully
How powerfully
You seized my future
As I seized yours
And built a home
And bonded lives

How proudly
How proudly
You hosted my seed
You swelled with pride
And you bore our son

How dearly
How dearly
You held him close
You nurtured his needs
And gave him milk
Of maturation

How intimately
How intimately
You brought the world
To his shores
And escorted him
Down its ancient corridors

How tirelessly
How tirelessly
You followed
My wanderings
Weary and worn
Forsaking composure

How wondrously
How wondrously
You conceived again
And formed another life
For us to love
For us to share

How patiently
How patiently
You committed your time
You shared your sleep
And rationed your rest

How wisely
How wisely
You studied the art
And mastered the task
Of guiding precious
And youthful lives

How selflessly
How selflessly
You gave yourself
To become and be
Not just one
But the pivotal part
Of a greater whole.

And
How splendidly

How splendidly
You came upon my stage
And moved beyond
The beautiful lover
That you are
To give me what
I most revere

Intimate
And loving
Friendship

MOTHER OF MY CHILDREN

Lithe and lovely
Boasting
Startlingly erect posture
For so tall a lady

She was my lover

Her breasts
Yet to be tasted
were positioned high and expectant
above a tiny waist
girdling a sensually lordotic spine
on a most perfect pelvic pedestal
whose backward tilt thrust the
lower abdomen forward to an apex
in gentle rotundae
proudly flanking
A most perfect umbilicus.
Athletically seasoned muscles
filled her gluteal fossae
and broadcast so alluring a contour
that competition could come only
from the juxtaposed legs
so long and so slender that
they seemed never to end.

She was my lover

Love, I gave to her
and she returned it
one hundred score over.
She was beautiful,
as was our shared love
And God blessed it
That glorious body
began to blossom and swell
bursting outwards with the New life
contained therein.
Her wee waist thickened
and her tantalizing breasts filled
with their destiny.
The body expanded with edematous fluids
and a store of adiposity sequestered
calories
Against that day when another's nutrition
Would prioritize gratification.

A son was born
who thrived on her eucharistic gift
of white Communion
Her body became his
And he became our joy
our fulfillment
Our hope for the future
our conduit to greater faith
A gift to us
he is yet our gift to Life.

With this tiny transient
she shared not only her body
she shared her sleep
her rest
her sinew
her time
her recreation
her figure
her health
her intimacy
her love life.

She shared her listening,
as Beethoven, Bach & Bruchner
and easy jazz, yielded
to infant theme songs
the rhythmic Hmpgrf-Hfmew, Hmpgrf-
Hfmew
of a breast feeding infant
a sigh, a cough, a bubble, a cry
These became her music.

She shared her composure
Circling tiny Soviet hotel rooms
through frightful nights
whispering "shushes" into an ear
screeching with pain
on an adventure
she was reluctant to take.

Throughout the years
since this son's conception
she shared her focus
Diverting most of her awareness
to another being.

She shared her leisure
yielding to a small child's
constant needs
Her discretionary moments
she gave to devouring books
on the care and rearing of children.

So much sharing
and to continue
She chose another
as did I
but my choice was easy.
Once again this lover of mine
gave, shared and sacrificed
all that she was and is
to create as ideal a beginning
as little ones can ever know.

And now, especially on this day
I say of this incredible woman ....

She was my lover
She is my lover

She has become
above all else,
Lover, Mother
The source and
Sustenance of life and
Health for these, my
beautiful children.

And I love her more.....

This woman —

who was, and is my lover!

by Robert S. Flowers
written for Susan -Wife, lover, friend
mother, professional woman.

Continued on Page 25

Special Commentary

Timeliness of Payments -- Our Lifeline

Malcolm R. Ing MD
Vice-Chair, Hawaii Medical Association Managed Care - Health Care Access Committee

I have just completed an informal survey of managed care contracts and other health insurance reimbursement patterns of payments with figures submitted by other physicians. I was enlightened to find that an unexplained 90+ day delay of payment ranged from 10% to 40% of all accounts of these physicians. (Some managed care plans have delayed all payments to physicians to 90 days or more!)

It is my opinion that no other profession has to put up with this type of insurance company payment abuse. The recent AMA "model managed care medical services agreement" states:

3.5 Promptness of Payment. Each payor shall remit to Medical Services Entity the Company Compensation within forty-five (45) days of its receipt of the submission of a Claim by Medical Services Entity sufficient in detail that Payor is able to reasonably determine the amount to be paid. If additional information is needed by Payor to evaluate or validate any Claim for payment by Medical Services Entity, Payor shall request any additional information in writing within forty-five (45) days of receipt of the Claim. Payor shall affirm and pay any valid Claims within thirty (30) days of receipt of such additional information. "..."In the event that a Payor fails to make such payment in a timely fashion as specified herein, Payor shall be obligated for payment of such amounts plus interest accruing at the annualized rate of the Wall Street Journal prime rate of interest on the first day of the month on which such amounts were due plus (3) percent.

According to the AMA bulletin, "This provision should prevent the practice engaged in by some companies of silently "sitting" on unprocessed claims or delaying payment on those the company has determined are not "clean" and waiting for the physician to notice and inquire regarding the status. In the event these unnecessary delays occur, the payor will be obligated to pay interest at three percent above prime on the claims that it should promptly paid."

It seems only fair that, if insurance companies expect physicians to accept drastically reduced rates of payment, so common these days, those same insurance entities should be required or encouraged to **pay in a timely manner**. There is a real possibility that, if the abuse continues to be accepted by the medical profession, the service may have to be curtailed jeopardizing the provision of medical care to our patients.

I strongly urge each physician of Hawaii to review his/her new medical insurance contract with the goal of having that insurance entity's contract contain the model AMA provision - the promptness of payment clause. It is time for medical insurance companies to take its collective foot off our lifelines!

Medical School Hotline

Professionalism in Medical Education

Gwen S. Naguwa, MD
Associate Dean for Student Affairs
Associate Professor, Department of Pediatrics

Damon Sakai, MD
Assistant Professor, Department of Medicine
Office of Medical Education

Professionalism is usually defined as mastery of a body of knowledge. But as physicians, we are aware that professionalism in medicine extends far beyond the simple acquisition of clinical content. It encompasses a set of behavioral characteristics and values, which form the foundation for the sacred trust bestowed upon doctors by their patients. Much has been written about the perceived deterioration of professionalism in physicians and both the Association of American Medical Colleges (AAMC) and the John A. Burns School of Medicine (JABSOM) have been developing programs to address this issue.

In the AAMC Reporter,[1] Dr. Jordan Cohen, President of the AAMC, recently reviewed the outcome of a colloquium sponsored by the AAMC this past summer, which attempted to define the attributes of a profession and explore what medical educators might do to cultivate the core values of professionalism in future practitioners. The participants were a diverse group of individuals, including historians, philosophers, social scientists, lawyers, deans, faculty, students, residents, and AAMC staff. They agreed that a profession is defined by its specialized body of knowledge, but added that it also has its own organized activities for continuous advancement, a responsibility to regulate itself, and an implied contract with society. Professions are also defined by a dedication to service above personal gain. The article describes the need for medical education to nurture professionalism. It also describes future initiatives to develop educational programs that will enhance professionalism in students. Dr. Cohen concludes by saying, "Medical educators, in my judgement, have no greater responsibility than to ensure that medicine remains, in truth, a profession. It has been. It should be. And it can be — but only if we play our part."

Drs. Gregory Makoul and Raymond Currey, in a special collection of articles on medical school courses in professional skills and perspectives in the January issue of Academic Medicine,[2] noted that, "Increasingly, U.S. society is holding medical schools accountable for the kinds of physicians they produce, not only in terms of the numbers and specialties but, more importantly, in terms of the kinds of professional relationships their physicians have with patients and the wider community." The series contained descriptions of several medical school curricula as evidence that the medical education community is working to re-integrate science with the healing. They envision "both Dr. Welby and the NIH combined into a single physician, one who will make us both well and whole." The formats differed dramatically, but topics common in these curricula included ethics (personal and professional), humanism, diversity, communication, the doctor-patient relationship, and societal responsibilities.

At the John A. Burns School of Medicine, there has been a growing concern among faculty that the considerable effort spent teaching students the science of medicine, is not duplicated in preparing them to practice the medical profession. In response to this concern and Dr. Cohen's challenge, planning has begun on the development and implementation of a longitudinal curriculum in professionalism. A longitudinal design is necessary because the development of professional habits and attitudes takes place over time and much of learning is experiential (or problem-based).

Borrowing heavily from materials in the American Board of Internal Medicine's Project Professionalism,[3] six major elements of professionalism were identified: Altruism (keeping patient interests foremost); Accountability (to patients, to society to address the health needs of the public, to the profession to adhere to ethical precepts); Excellence (including a commitment to life-long learning); Duty (free acceptance of a commitment to service, regardless of ability to pay, playing an active role in professional organizations, and volunteering one's skills and expertise for the welfare of the community); Honor and Integrity; and Respect for Others. Using these elements as the curricular content, a process was begun to identify what was already being covered in educational programs, and how areas not currently addressed can be incorporated into the medical school curriculum.

Currently, for example, Respect for Others or humanism, and Duty is introduced in the first year orientation as a part of the enormously popular White Coat Program and Ceremony. The highlight of this event is the presentation of white coats ('cloaks of compassion') to each student by alumni in the presence of their friends and family, and the administration of the Hippocratic Oath. Students also participate in an in-depth discussion of the significance of the Oath, as well as a seminar in which they analyze several common scenarios and professional dilemmas they will likely face as students and physicians. Students also write a personal mission statement in which they identify personal and professional goals.

Within the curriculum itself, medical students are provided with lectures and seminars discussing common ethical topics such as confidentiality, informed consent, and truth-telling. Sessions on communication skills in areas such as delivering bad news, discussing advanced directives, and futile care also are conducted during the current academic year.

Another feature at JABSOM is the flexibility of our problem-based learning format, which makes it ideally suited to accommodate new issues in professionalism. Health care problems studied by students in this curriculum can be revised to include issues of professionalism. Examples of altruism, accountability, duty, and humanism can be inserted for students to research, learn from, and adopt. Rewriting cases to emphasize humanism in medicine would also be a positive step.

In addition, a formal professionalism curriculum for all University of Hawai'i Residency Programs, running in sequence or in parallel with that of the medical school, will help strengthen professional training of our students. Such programs will increase the likelihood that resident role-models, so important in the training of clerkship students, will continue to model and support professional behavior of the highest standard.

In summary, JABSOM, in response to observations of our own faculty as well as the AAMC and the general public, has begun to formally address the professional development of medical students in the art and practice of medicine in addition to the science. Fortuitously, it is the same curriculum model, problem-based learning, which will serve as one of the primary methodologies by which issues will be presented. It is an obligation we as educators have to ensure that medicine retains the stature it has and should be afforded as a profession.

References

1. AAMC Reporter, Volume 8, No. 1, October 1998
2. Makoul, Gregory, PhD & Curry, Raymond, MD, "Uniting Science and Healing in Tomorrow's Doctors", Academic Medicine, Vol. 73, No. 1, January 1998
3. Project Professionalism, American Board of Internal Medicine Committee on Evaluation of Clinical Competence, 1995

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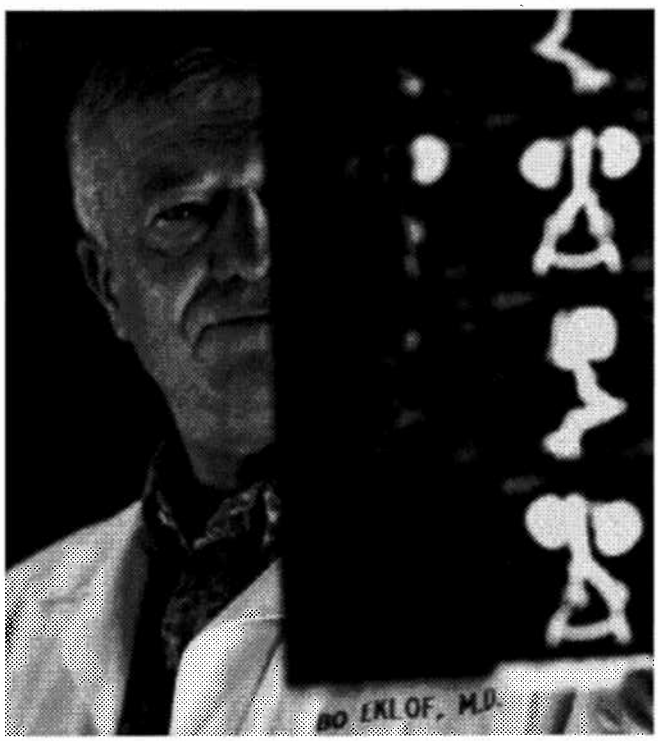

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– Friday Noon Conference –

National Health Insurance

John S. Spangler, MD

February 19, 1999
12:30 – 1:30 p.m.
Doctors Dining Room

Learning Objectives
At the conclusion, participants should be able to:

- Describe current medical coverage of Americans.
- Understand why current medical coverage has many flaws.
- Summarize why single payer has advantage and disadvantage

– Friday Noon Conference –

Environment of Care Issues That Impact Physicians' Daily Practice

Kevin Matsukado, Rose Arpon, Michelle Fisher, Mike Lau, and Clayton Takara

February 26, 1999
12:30 – 1:30 p.m.
Doctors Dining Room

Learning Objectives
At the conclusion, participants should be able to:

- Understand and identify Infection Control, Tuberculosis, and Bloodborne Pathogens.
- Learn how to prevent Back Injuries.
- Understand Radiation Safety.
- Summarize Safety, Security, Hazardous Materials and Waste, Life Safety, Medical Equipment, Utility, and Emergency Preparedness.

Please call Fran Smith at 522-4471 for more information.

Complementary and Alternative Medicine (CAM): A Review for the Primary Care Physician

Janet Onopa MD

It is difficult to find a satisfactory title for this review, because both the word "complementary" and "alternative" are not very politically correct currently. It is probable that there is no fully politically correct word, except for "non-allopathic," which is unfamiliar to many MDs. Accurately used, the term "allopathic" is as opposed to "homeopathic," so from its origins, "allopathic medicine" should include herbal medicine. However, in practice, herbal and many other non-homeopathic treatments are called "non-allopathic," whereas conventional medicine is called "allopathic." "Complementary" usually would include practices that are used ***with*** *conventional western medical treatments, and "alternative" would include those practices that are used* ***instead*** *of western medical treatments. For most of this review, the terms "non-allopathic," "alternative," and "complementary" could be used interchangeably.*

This topic has gained interest, and received some allopathic legitimacy, in part because of an article that David Eisenberg, M.D., published in the New England Journal.[1] In 1990, he performed a telephone survey of about 1,500 adults in the U.S. and asked them about the use of treatments and practices that were "alternative," which he defined as not generally being taught in the U.S. medical schools and not being readily available in U.S. hospitals. From his sample, he extrapolated that in 1990, about 60 million Americans used alternative medical treatments, at an estimated cost of $13.7 billion. There were more visits to alternative healers than to primary care MDs that year, and over two-thirds of people who did use alternative medical treatments did not tell their doctors about it.

Now that third party figures are becoming interested in paying for alternative medical practices (especially naturopathic, chiropractic, and acupuncture services), allopathic physicians will be increasing in the position of being able to refer people to alternative providers, and insurers will pay for services that MDs approve. Therefore, it will become increasingly important for physicians to have a degree of familiarity with alternative treatments (including efficacy and risks). So far, to date, there have been no cases of malpractice for giving advice about the use of alternative medical treatments, but liability will certainly exist to anyone who delivers treatments, such as acupuncture or spinal manipulation, in the event of an adverse effect.

This review will briefly introduce some of the most common alternative practices likely to be seen in Hawaii communities: Homeopathy, Herbs, Naturopathy, Chinese Medicine and Acupuncture, and Chiropractic and spinal manipulation, and a brief discussion of Dr. Eisenberg's recent position paper on advising patients about alternative practices.

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Homeopathy

Homeopathy was invented by Samuel Hahnemann, a physician who lived from the mid-1700s to the late 1800s. He was alarmed by the rather toxic nature of medical treatment of his day: it was common to treat by purging or bleeding, and it seemed to him that the doctors were often doing harm in their treatments. (This is a recurring theme among the founders of alternative methods.) He wanted to find some treatment method which was gentle, and which would cause no harm.

In the early 1800s, he revisited an old idea which Hippocrates had promoted, that of the "Law of Similars": *simila similibus curentur* (like cures like). The idea occurred to him after he took an overdose of quinine (cinchona bark) and became ill with it. He noticed that when he got sick, his symptoms were similar to those of malaria. At the time, physicians knew that quinine cured malaria, though they did not know the cause for malaria. Hahnemann surmised that perhaps it is because quinine **mimics** malaria that it is capable of **curing** malaria, if taken in lower doses. It is taking a "simillimum," a substance that can mimic the illness, which will cure the illness. Hahnemann thought that the similar drug would activate some vital force in the body to react against the illness.

He advanced his idea to his colleagues, and together they set about the task of "**proving**" drugs: identifying what symptoms they caused in high doses, in order to match them up with illnesses, after which they would be diluted down to non-toxic doses. Hahnemann chose "reliable observers" (including himself), who would take a large dose of a medicine, usually herbs and minerals that were used medicinally at the time, and note down what the symptomatic results were. They pooled several observers' findings and identified what each drug's signature symptoms were. This process is called "proving" a remedy.

They tried to identify the minimum dose of each drug that would be effective as a cure. To Hahnemann's surprise, he discovered that no matter how far he diluted the drugs, they still seemed to work as cures for illnesses. The explanation for this was that the method of

dilution could be releasing some aspect of the original substance into the diluent (usually distilled water or alcohol solution). Hahnemann developed the dilutional method called **succussion**, wherein very precise dilution of the drug would be measured, and the container with the dilution would be pounded gently with a felt pad in a precise way, and then that solution would again be precisely diluted again, and pounded again. This method would activate the water or alcohol solution, which was being used as the diluent. If there was a substance that was not soluble in liquid, it could be ground up with milk sugar, (which was considered an inert substance) and that is called **trituration**. For every substance, the observers noted that the more dilute it became, the more potent it became. So in homeopathy, dilution is the equivalent of **potency**, and the act of dilution is called potentization, or **potentiation**. This is the opposite of what conventional medical doctors usually think of as "potency." In homeopathy, higher potencies are considered to be more powerful and able to stir up the body's "vital force." In classical homeopathy, patients can only get the extremely dilute (potent) medicines from a licensed practitioner and can't buy them over-the-counter.

Labeled homeopathic medicines denote potency by two methods. In Europe, they use the "decimal system" which is denoted by the symbol "x." 1x is diluted 1:10, and 2x is 1:100 (1x diluted with 9 parts diluent), etc. The "centesimal system" is denoted by the symbol "c" and is used more America. It starts with 1c= 1:100, and each successive dilution is 1 part to 99 parts diluent, so 2c is 1:10000, adding two zeros with each additional dilution.

Hahnemann and his colleagues thought through the mathematics, and realized that there is a point where the dilution is likely to become pure water, with a very high likelihood that there are no molecules of the original drug left in the solution. When this point is reached it is called **ultramolecular dosing**. This happens at 12c or 24x, where one can be almost 100% sure that there will be nothing of the original substance left in the homeopathic remedy. This became a source of controversy, and some people who practiced homeopathy thought that efficacy at ultramolecular doses defied logic, and chose to use only the lower potencies. Today, most homeopathic practitioners agree that high potencies do work better than low potencies, even at ultramolecular doses.

In classical homeopathy, it is considered ideal to use only one individualized, single simillimum in the treatment of an illness. Much of the "art of homeopathy" is that of choosing the correct simillimum. This is accomplished by means of a very careful history and exam, as well as incorporating knowledge of the type of person the patient is (body type and personality type). The practitioner then picks the one salient symptom of their illness to match with a simillimum. In classical homeopathy, a single individualized remedy is chosen, but in modern homeopathy treatments are often combined, especially in lower-potency OTC proprietary homeopathic remedies. There is some ongoing controversy within the homeopathic community about whether multiple remedies are effective or not.

Individualization is a hallmark of classical homeopathy, and this has been a problem when it has come to developing randomized trials. Many homeopathic practitioners will not accept trials without individualization as valid tests of the efficacy of what they do, since all their practice involves individualized remedies. The same criticism applies to the use of multiple remedies, which have commonly been used in clinical trials. Hahnemann described one situation when individualization was not used and that was for epidemics. During a scarlet fever epidemic, he used belladonna as a *remedy epidemicus*, and gave it to all patients for both treatment and prophylaxis, reportedly very successfully.

In practice, homeopaths use two main types of references: a *materia medica*, or book that lists the symptoms that drugs can cause, and a *repertory*, or index of symptoms and what remedies might match. The selection of the potency to use is part of the "art" of homeopathy, but there are several principles involved. Treatments for mental symptoms are usually prepared using higher potencies than those for organic symptoms. Treatments for older patients are usually made with lower potencies, since older patients can't tolerate the stirring up of the vital forces produced by high potencies. Children usually are treated with higher potencies.

If patients are not improving with homeopathic remedies, practitioners will often review the remedy they chose. In particular, the higher potencies must be well selected and are only supposed to be effective if the right simillimum is used. So, if a practitioner finds his/her patient is not finding symptom relief, they will review the history again and perhaps start a new remedy. Also, in homeopathy, treatment will classically produce a "homeopathic aggravation" before the illness starts to improve. Practitioners have often supported patients through the aggravation period with placebo use and this is an accepted practice. Of interest, one aspect of homeopathy is that practitioners tend to campaign against fluoridation of municipal water supplies, with the belief that small doses of fluoride added to the city water can become naturally succussed as the water travels through the city's pipes. This would, in turn, lead to mass exposure to a potentially toxic potency of homeopathic fluoride. So, homeopathy enthusiasts may be active in anti-fluoride citizen's action groups in metropolitan areas.

In order to clarify what homeopathic remedies are, the following are examples of a few common remedies dispensed to patients:

(1) Allium (onion): this is used for neuralgia pain, illnesses with weepy eyes.
(2) Apis (ground up honeybees): this is used for stinging pain, blisters, and fever with dry skin.
(3) Arnica (toxic flowering herb): used for shock, pain, bruising, and injuries (arnica is used topically in herbal medi cine for injuries).
(4) Ipecac (herb): this is used to prevent/treat vomiting.
(5) Belladonna (herb): for illnesses that mimic anticholinergic symptoms, like flushing, hot fever, and dilated pupils.

Now that we have reviewed the underlying beliefs and practice of homeopathy, the question for conventional practitioners is clear: does homeopathy work? There is a body of clinical investigation on homeopathic remedies.

An excellent overview of homeopathic research is found in an article by three researchers from the Netherlands[2] and published in the *British Medical Journal* (BMJ) in 1991. Their conclusions led to a huge controversy, and the BMJ received more mail in response to this overview than they ever received from any prior article. It is a meta-analysis and overview of clinical trials of homeopathic treatment. The investigators reviewed 107 trials, but 2 of these were comparing one homeopathic treatment with other homeopathic treatments, leaving 105 trials that compared homeopathy with

placebo or standard medical treatment. Of these, 81 indicated positive results (homeopathy is likely to be effective), and 24 found no evidence of effect. Most trials had relatively poor quality methods but there were some that were that were well designed. The authors considered it likely that some publication bias existed. Publication bias can work in favor of, or against publication, depending upon the orientation of the editors. Alternative medical journals would theoretically be more likely to want to publish items that had positive results for alternative treatments, but conventional medical journals would be more likely to want to publish negative results. However, review of the outcomes does not reveal any correlation between the orientation of the journal (alternative vs. conventional) where an article was published and whether it demonstrated positive or negative results.

Of the best quality trials in homeopathy, 15 had positive results, and 7 did not. The authors of the BMJ overview indicated that there is some evidence that homeopathic treatment can be efficacious in the following illnesses: respiratory infections, hay fever, asthma, GI complaints (especially gastritis and irritable colon), arthritis pain, migraines, and recovery from sprains. Most trials were with polypharmacy (multiple combined remedies), and/or did not have individualized treatment, which has been a source of criticism by the many homeopathic practitioners.

Herbal remedies

This will be a brief review of some of the current oversight (or lack of it) on herbal medicines, some of the most commonly used herbs, and a review of a few herbs with documented toxicities.

The U.S. law currently does not provide good oversight of herbal remedies and dietary supplements and there is some work being done to improve the regulation of these products. Other countries have done a little bit better than the U.S. in crafting legislation. Currently, the U.S. is following the Dietary Supplement Health and Education Act of 1994. Senator Oren Hatch of the state of Utah (which has an active herbal products industry) introduced this law. It permits the marketing of "dietary supplement" with no required approval of any government agency, so long as there is a label on the product that states that (1) no Food and Drug Administration (FDA) evaluation of that product has occurred, and (2) the product "is not intended to diagnose, treat, or prevent any disease." When these criteria are met, the burden of proof about the product's safety, or lack of it, would rest entirely on the FDA, and not on the manufacturer of the herbal/dietary product. In practice, no one is actually taking responsibility for the safety of products, unless the FDA chooses to try to prove that a product is unsafe. The manufacturers can suggest doses on the label and these products are not standardized.

Other countries have better rules. For example, Germany gathered together a group of experts, called the German "Commission E," which was in effect from 1978 until 1994. This commission included toxicologists, pharmacologists, physicians, and other scientists and they produced 400 monographs on herbal medicines. They reviewed the available evidence, using a standard of "reasonable certainty of efficacy" and then produced guidelines for their use, dosing, and administration. The Commission E's monographs are available in English in the U.S., though more scientific evidence has been accumulating since they were published.

In contrast, in the U.S., in order to obtain FDA approval for a drug, a company would need to provide evidence and meet a standard of "absolute certainty of efficacy," and the average cost to achieve that standard is now about $350 million per drug. Since none of these

herbs or dietary supplements is capable of having a patent on them (a patent would make the investment worthwhile in future profits), no company would be willing to try to meet that FDA standard. So, unless the U.S. derives a separate category for herbs/dietary supplements or any non-patentable health products, to allow for a less-rigorous (and economically feasible) standard of efficacy, these things will never receive the funding for the research necessary to become FDA-approved. Hence, they will lack standardization, federal controls, or even testing to see if they are safe or effective. Many sources of information about herbs recommend that prior to using an herb, the patient should discuss its use with their physician, making it important for physicians to know about common herbs used and their safety and efficacy.

In general, Western herbalists will use medicinal herbs either singly, or mixed in combinations. In Asian cultures, it is very unusual to see a single herb prescribed; usually prescriptions are for herbal mixtures. There tends to be a common belief among herbalists that the "naturalness" of the product makes it balanced, and safe. Many patients will not take any purified extracts of herbs, with the belief that if a substance is purified, then it will take away its natural balance and it may destroy its positive attributes. The scientific studies on herbs are in general small in number, and most of them are not well done. Many of them are tested only on animals, or using very small numbers of patients, or are not randomized or controlled or blinded adequately, or are only *in vitro*, and many of them aren't available in English.

The following is a very brief review of some of the commonest herbal remedies and dietary supplements being used by patients today:

St. John's Wort, or Hypericum. This is a widely used herbal remedy for mild to moderate depression, and possibly for anxiety (there is a trial ongoing regarding its efficacy for anxiety). There are some well-designed small clinical studies on St. John's Wort, unlike many of the other herbal products used. A large long-term National Institute of Health (NIH) trial is ongoing. In the studies to date, it has demonstrated efficacy equivalent to imipramine in some.[3,4] It's been safe in the studies to date, much safer than the tricyclic antidepressants, and with far fewer side effects. In the German commission E report monograph on St. John's Wort, it is described as having an monoamine oxidase (MAO) inhibitor-like mechanism of action, based on two older studies. Subsequently there has been more research produced about it and it has been shown to have only trace MAO inhibitor effects at clinically relevant doses. There is some recent evidence that it acts as a combined seratonin, epinephrine, and dopamine reuptake inhibitor.[5] Because of the seratonin effects, it may be wise not to combine it with MAO inhibitor use. Hypericum is very popular, and is receiving considerable coverage in the lay press, but long-term studies are needed. It is the most commonly used anti-depressant in Germany, where it is prescribed three times more than any of the antidepressants used in the U.S.A. The *British Medical Journal* published an overview and meta-analysis in 1996 entitled, "An Overview and Meta-Analysis of St. John's Wort for Depression".[3,5] They reviewed and combined data from 13 trials comparing Hypericum with placebo, and demonstrated a positive effect on depression, with 55% response to the herb compared to 22% responding to placebo. Then they compared it with tricyclics, specifically imipramine, 64% responded to Hypericum with 58% responding to the imipramine. So, it appears to be at least as efficacious (and possibly more efficacious) than the tricyclic antidepressants. It has not been compared to the SSRI antidepressants in clinical trials. Side effects were very similar to placebo, and significantly less than those taking trycyclics. The main side effect documented for Hypericum is photosensitivity, which can occur with large doses, though this appears unlikely at usual doses. The time frame for these studies was short, with only eight weeks maximum follow-up.

Echinaceae. Echinaceae was reported to be the most commonly purchased herb in the U.S. in 1996-7. There are three different species of Echinaceae sold: *E. angustifolia, E. purpurea,* and *E. pallida.* It's available as a root extract or tincture, and very popular for use to treat viral URI's. It is used as an "immune booster" and to treat colds and other viral and bacterial infections. There are several published studies on Echinaceae, but with a paucity of large randomized controlled blinded clinical trials. Animal and *in vitro* studies demonstrate increased cell-mediated immunity, enhanced macrophage activity, increased phagocytosis, and one Echinaceae species seems to have antistaphylococcal and antistrep activity. The herbal literature advises it for short-term use only, because it may activate the immune system. So, most lay sources advise against its long-term use, for fear of inducing autoimmune illness, and against its use at all in patients who have any autoimmune illnesses such as SLE, rheumatoid arthritis, or multiple sclerosis. However, there are no controlled studies to indicate that autoimmune flares have been a problem with the use of Echinaceae. Toxicity is reported to be rare and most evidence to date suggests that Echinaceae seems safe.

Uva Ursi or bearberry, This is an evergreen shrub, found in the forest of North America. It is an old Native American herb, used to treat and prevent urinary infections. The leaves are chewed and eaten, and are available as pills. This herb appears likely to be safe, with no reported toxicities, but the paucity of good data on safety and efficacy make it difficult to recommend.

Saw Palmetto *(Seranoa repens).* Commercial extract of saw palmetto (including one called Permixicon) is increasingly used by men who take it to relieve benign prostatic hypotrophy (BPH) symptoms. The farmers in the southern U.S. are happy about this: the plant is a weedy little palm which takes over the fallow fields, and farmers must pull the plants out before they can replant their crops, but now they can sell their erstwhile weeds on the market. There is some data to indicate that it may help relieve symptoms of prostatism, and toxicity in trials to date has been negligible. It contains a mixture of chemical compounds and has activity on several levels: there is slight 5-alpha-reductase activity, but likely too little to be clinically significant, and in trials there has been no effect on PSA levels, which should drop if there is significant 5-alpha-reductase action.[6] It has been shown to block binding of dihydrotestosterone to prostate cells' androgen receptors, and this is the most popular current theory for its mechanism of action. One European trial showed the extract to have similar efficacy to finasteride, and small trials comparing it to alpha-blockers have shown no significant differences in efficacy.[7] All trials are hampered by the presence of large placebo effects consistently found in trials about treatment for

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the symptoms of BPH. Larger placebo-controlled trials are sorely needed.

Garlic ***(Allium sativum)*** seems to lower cholesterol, and inhibits clotting. It has evidence of fibrinolytic activity and it lowers platelet aggregation *in vitro*. It may help lower blood pressure; there have been studies with divergent results on garlic's effect on treating high blood pressure. There is indirect evidence that it may have an antibiotic effect, and it has been touted as helping to treat colds and yeast infections. It has ingredients that are antibacterial but whether it works as such when ingested is not that clear. Some herbalists say it ought to be eaten raw instead of cooked, because cooking seems to inactivate its main pharmacological ingredient, allicin. The best effect was seen with very high doses, which will be equivalent to 5-20 raw cloves a day for a 175 lb. person; this might be socially problematic! There were 2 meta-analysis by different researchers out of Oxford, England in 1993.[8,9] Each reviewed studies with standardized powdered garlic (with a standardized allicin content). They had conflicting results, and they came up with opposite conclusions. More recent trials have also had conflicting results, some showing significant decreases in serum LDL cholesterol, and others showing no effect. The discrepancies may depend on the garlic preparation used. The upshot is that garlic **might** lower cholesterol, and it **might** lower blood pressure. It is unlikely to have adverse effects beyond halitosis, though some experts recommend that patients not take garlic supplements if they are anticoagulated, for fear of additive effects.

Feverfew is used for migraine headaches. Two or three fresh leaves are supposed to be ingested every day, however, it is usually not sold as fresh leaves. It may have a spasmolytic effect, similar to methysergide or parthenolide. It has indirect anti-seratonin properties on animal tissue *in vitro*.[10] Its clinical efficacy has not been demonstrated with well-designed large clinical trials. Many commercial preparations available in the U.S. seem to have a minute amount of the herb, which is unlikely to have any effect. It appears safe thus far but good studies are needed.

Valerian is probably the most commonly prescribed sleep medicine in Europe. It is from the root of the plant *Valeriana officinalis*. It has been used medicinally to induce sleep for thousands of years. It has an ingredient that binds to the benzodiazepine and other receptors in the brain, and it has sedative properties. It is available as a tincture, or freeze-dried extract capsules. Its safety seems well established, especially considering its widespread and long-term use. A published case report of an intentional overdose showed that its toxic effects were very mild. In some small studies, it doesn't seem to cause any addiction or rebound insomnia when it is discontinued, but larger well-designed studies are needed.

Dong Quai or Tang kuei. *Angelica sinensis* is the Latin name for this medicinal plant, which has been called "the female ginseng," and it is often used for various gynecological ailments. It is purported to have weak estrogen-like activity and so some literature has advised avoiding use of the herb for patients who have breast cancer. However, it does not have phytoestrogens, and research to date has not been able to clearly identify whether it does have any estrogen activity. It does contain several courmarins, which are vasodilators and antispasmodic, though the utility of these effects has not been well-defined. Clinically, it is being used for menopause, menstrual irregularity, PMS symptoms, and as a women's general "tonic" (a word used frequently to describe herbal medicines, meaning that it helps people adapt to their environment, keeping them healthy, and making them feel more energetic). It appears to be safe in the usual doses but studies are lacking. It is popular right now, especially for treating menopause symptoms.

Ginseng ***(Panax ginseng).*** There many different plants that are sold under the name "ginseng," but the genus *Panax ginseng* is the source for true ginseng root. Adulteration and the use of other plants called Ginseng (e.g. Siberian Ginseng, American ginseng, etc.) are a problem in identifying its characteristics. True ginseng root is very expensive; it takes six years to grow a crop and it is easily and commonly adulterated, and easily inactivated by processing. Ginseng is supposed to be an adaptogen, or "tonic" and is thought to be antifatigue and antistress. It was thought to have some estrogenic activity, but recent studies have not found any evidence of direct estrogenic effect. It might induce hypertension in some individuals. Ginseng is a classic example of the "doctrine of similars," which is found in all cultures. The "doctrine of similars," states that there is some physical clue about the plant which tells you what malady it will be useful for. For example, if a plant has yellow sap, it would be useful to take it for jaundice. Ginseng root grows in various shapes, but it often looks like a little person: it may look like it has arms and legs, and herbalists have taken this as a sign that it is supposed to be for the well-being of the whole body. It also often looks phallic, and at times even a bit like female genital labia, so it has been purported to be useful for male potency, and as an aphrodisiac for males and females. Ginseng has apparently been studied to see if has any aphrodisiac effect, with good evidence that it does not have any effect as an aphrodisiac. However, it is still marketed as such, and herbalist literature states that it is useful to improve the sex life. (There are a countless other interesting examples of the "doctrine of similars." For example, there is a leaf that the South Americans use which is quite stiff and if it is crumpled up, it will pop back into shape, and that leaf is also used as a male aphrodisiac.)

There are many varieties of ginseng, and it is often not labeled correctly. There is adulteration and often processing inactivates it. All of this variability has made it hard to investigate reported toxicities. There have been reports published of ginseng toxicities, and the product when investigated has been found to not have any ginseng. There are no good studies that demonstrate ginseng's effectiveness. It is probably safe, based on the thousands of years it has been used, but adulteration makes it very hard to be certain.

Ginkgo biloba. Ginkgo leaves come from an ancient tree species; it has been around since the ages of the dinosaurs. It is hardy and grows in cities all over the world. A standard extract is produced from the leaves which contains 24% flavinoids and 6% terpenes; tablets always have 40 mg of the extract. It is easy to standardize and relatively inexpensive and commonly available, so it is easier to study this herb than one like ginseng. Its use is primarily to prevent or improve memory loss, especially in the elderly, and a recent article in JAMA demonstrated a small but significant effect on

decreasing progressive memory loss in patients with mild dementia.[11] It is supposed to improve cerebral blood flow, and some studies have indicated a possible positive effect for other neurological ailments including headaches, tinnitus (especially if it has a CNS source) and depression. There is one study published in the *Aviation, Space, and Environmental Medicine Journal* in 1996.[12] The authors did a randomized controlled trial of an extract of ginkgo biloba 761 used for altitude sickness during a Himalayan expedition. There were 44 men in the study. They randomized them and gave half of them 80 mg orally BID of standardized ginkgo extract and compared them to a double-blinded placebo group. The results were striking: none of the ginkgo group developed signs of cerebral mountain sickness vs. 40.9% developing such symptoms in the placebo group ($p= 1.4 \times 10\text{-}3$). The difference was also striking for respiratory symptoms and high altitude pulmonary edema (HAPE): three in the ginkgo group developed respiratory mountain sickness symptoms (13.6%) vs. eighteen (81.8%) in the placebo group ($p=1.2 \times 10\text{-}5$). Since prior studies had indicated that ginkgo had a positive effect on improving circulation to the extremities during cold exposure, the researchers took a plethysmography device along on the climb up the mountain. Then they checked the study participants for both objective evidence of compromised blood flow of their extremities with plethysmography, and a questionnaire about symptoms of vasomotor constriction (stiffness, numbness, aching). These were also highly significant and demonstrated a marked improvement of peripheral circulation among the study participants who took ginkgo. This study has attracted virtually no notice in the medical community, and perhaps it needs to be repeated to see if it can be replicated in a larger population before ginkgo can gain acceptance as a possible safe and efficacious preventative for acute mountain sickness and frostbite. It increases arterial and capillary vasodilatation, and it slightly lowers clotting time, so it should be used with caution in people on aspirin and blood thinners. A reported overdose of Ginkgo caused restlessness, nausea, vomiting and diarrhea. This is an herb which is ripe for well-controlled sizable trials.

Glucosamine is a constituent of cartilage glycosaminoglycans. This is sold as a dietary supplement. Glucosamine stimulates cartilage cells to produce glycosaminoglycans and proteoglycans, which may allow restoration of cartilage in intra-articular destructive diseases. There have been trials, all short term, that have shown that it's effective in relieving pain and increasing range in motion in osteoarthritis. A four week double-blind trial in 252 osteoarthritis patients demonstrated that glucosamine was significantly superior to placebo.[13] In another four-week trial on 200 patients, it was as effective as ibuprofen 400 mg tid from the second week on.[14] Glucosamine seemed slightly slower to relieve symptoms, but subsequently it works as well (or better than) ibuprofen. A double-blind eight-week trial with 40 osteoarthritis patients randomized to two groups: one group took 500 mg glucosamine tid and another took ibuprofen 400 tid.[15] This study demonstrated that ibuprofen and glucosamine were as about equally effective during the first two weeks of the trial, and by week eight, the glucosamine group was doing better. Another study demonstrated that the positive effect of glucosamine on arthritis symptoms seems to last for a week or two after stopping the drug, unlike NSAIDs. In all trials, glucosamine is well tolerated. Any side effects were equally as common in the placebo group. Commercially, it is often combined with chondroitin sulfate. There are no good studies that I have found on the efficacy of chondroitin but there was a popular book called The Arthritis Cure, that was a bestseller last year. The author claimed that glucosamine should be combined with condroitin for maximal efficacy, and now they sell preparations with the two combined in the ratio he proscribed. There was a recent review in *The Medical Letter* (a conservative and respected publication), in September of this year.[16] Their view was that glucosamine is safe and possibly effective, but there is a need for longer trials. As they have with all "dietary supplements" that they review, they caution with the fact that this is a dietary supplement, so you never know if what you are buying is what is on the label. The NIH's Office of Alternative Medicine is currently funding a large trial on both glucosamine and chondroitin in the treatment of osteoarthritis.

Toxicities from Herbs

There are some important herbal toxicities that practicing physicians should be aware of.

Germander. This is an old time drug used to treat diarrhea and used topically for oral lesions. It was found to cause hepatitis and its use has been banned in France, but is still readily available in the U.S.A. It's especially worrisome when patients combine it with other potential hepatotoxins.

Chaparral. This is an old American Indian remedy. This is used for **everything** (always a good warning sign that an herb is probably not good for anything!), including arthritis, cancer, VD, tuberculosis, URI symptoms, as a hair tonic, and to remove LSD from your system. It has been conclusively proven not to remove LSD from your system, by the way. There is an ingredient in chaparral that has very potent antioxidant qualities called NDGA, which has no proven medical value, but it has been shown to increase the life span of a mosquito from 29 to over 45 days. Nevertheless, chaparral was removed from the Generally Recognized As Safe (GRAS) List in 1990 because it causes subacute hepatic necrosis.[17,18] You can still buy it in health food stores in the U.S.

Comfrey is an old-time remedy and its name sounds like it should make the ill well again. It comes from the plant *Symphytum officinale*, and it is used for many different illnesses, something of an herbal "wonder drug." It used to be called "knit-bone," and was applied externally as a poultice for broken bones and internal injuries. The tea has been used to treat peptic ulcers, it is purported to "purify the blood," in addition to being recommended for almost any ailment you can think of. All comfrey products tested have contained hepatotoxins called pyrrolizidine alkyloids. There are several herbal remedies in various countries with these same toxic ingredients, including "bush tea," and "gordolobo tea" in Central America and Mexico; these also contain pyrrolizidine alkaloids.[19] They can cause liver cell necrosis and veno-occlusive disease in lungs and liver. Veno-occlusive disease can cause pulmonary hypertension, and there have been several documented cases of comfrey-induced pulmonary hypertension. The toxicities seem to be related to the total dose, host susceptibility and route of exposure, with the root being considerably more likely to have significant levels of toxic

alkyloids than the leaves. It's been banned in Great Britain and in Canada, but you can still buy it here in the U.S. Upon review of several of the herbal books at a local bookstore, several had sections extolling the virtues of Comfrey, with nothing about potential health problems or any indication that the herb has been banned in other countries.

Scullcap ***(Scutellaria lateriflora)*** is commonly used for "female weakness," as a tonic, and it is purported to have tranquilizing and antispasmodic activities. The studies done on it to date have failed to find any effect at all, so it seems doubtful that it has any medicinal value. It was reported to be hepatotoxic in four women who were using it to treat stress. Subsequently, the investigators had reason to wonder if this was actually caused by a Germander substitution. It is not really clear that the scullcap is toxic but there have been published warnings about possible toxicity.[20]

Sassafras ***(Sassafras albidum)*** is what old-time root beer used as a flavoring and it was used as "spring tonic". It has safroles and allylbenzenes which have been proven to cause cancer in mice. It is not clear if it is carcinogenic in humans because we don't have the enzymes that change the sassafras ingredients into the carcinogenic substances, so we probably don't have the risk of carcinogenesis that mice have. It is not clear if it should be banned, but right now it is prohibited by the FDA as a flavoring or a food additive based on the murine studies. However, you can still get it as an herbal remedy, primarily in sassafras tea. There is no evidence that it does anything medically at all, so it may be prudent to advise avoidance of this herb as long as there exists doubts about it's safety.

Naturopathy

In order to be licensed as a naturopath in Hawaii, a practitioner must have a N.D. degree, obtained from a four-year naturopathy school. There are two such institutions in the Pacific Northwest, one in Arizona, and there are others opening in the East Coast. Their training is like medical school, their first two years are basic science, pathology and other basic sciences, and the latter two years are devoted to study about herbal medicine, homeopathy, nutrition and lifestyle changes, which are the basics of modern naturopathy. Most schools teach something about spinal manipulation, and spend considerable time teaching counseling techniques, and some teach some acupuncture, although usually that would be taught at a separate institution. The training in the last two years is in the outpatient clinics that are affiliated with the schools.

Naturopathy started in Germany, again as a result of physicians' horror at the toxicity of the commonly used medical treatments. Early naturopaths were interested in "water cures" where they gave patients pure spring water to make them better, and they used treatment intended to build up the healing power of nature, with emphasis on gentle, nontoxic remedies. A naturopath interviewed here on Oahu indicated that about two-thirds of his practice was pain treatment, adjunctive cancer care, chronic allergies, chronic arthritis, chronic GI problems (especially irritable bowel, chronic nausea) and menopause and PMS. Some naturopaths interested in women's

health may have most of their practice treating menopause and PMS. Basically, naturopaths often treat illnesses that conventional physicians don't have reliably safe or effective treatments for. Naturopaths can order diagnostic tests and they can give homeopathic treatments but they don't have a license to prescribe drugs.

Chinese Medicine

Like many complementary medical systems, Chinese medicine is based on the idea that illness arises out of a life or body force that has been disrupted or placed out of balance. Chinese medicine is based on the idea of Ch'i, the life force. In Chinese medicine, all of life is Yin or Yang, and sickness is due to the imbalance of these two opposites. All medical care is directed to adjusting the balance. The concepts of Yin and Yang are complex. Yin is cold and female and Yang is hot and male, but it is much more complicated than that.

The Chinese system of medical diagnosis is very different from anything that is taught in western medical schools. There is extensive emphasis on using the pulse for diagnosis. There are six different pulse points with three depth levels for each pulse point. Chinese practitioners take the pulse very carefully and they make the diagnosis from the character of the pulses. In addition, the tongue is also used for diagnosis, and Chinese texts may have many pictures of tongues that tell you what the diagnosis is. In addition to the pulse and tongue diagnoses, practitioners depend on general observation of the patient. The diagnoses are not like anything that western physicians are familiar with. The nomenclature is entirely different, with symptom complexes that are grouped together in ways entirely different from any western symptom complexes. Since the language for illnesses is foreign from Western medicine, it is very difficult to translate back and forth. "Stagnant blood" is one of the most common diagnoses, and "extravasation" is frequently referred to as a common illness. It is very confusing to try to make sense of Chinese medical books after learning about illness from a European perspective.

Chinese herbs are given in formulae or combination, and it would be unusual to have a single herb given. Herbal formulae are usually steeped as a tea, often unpleasant-tasting. There are over 7,000 different herbs that are used in Chinese medicine. Patients will be prescribed a bag with a mixture of herbs, and it is not uncommon for the herbalist to use substitutions by accident or on purpose, which makes it very difficult to track ingredients or the source of any toxicity. In general, toxicity from Chinese herbs is quite uncommon. Of the150 commonest herbs given, about 10 of these have clearly had instances of reported toxicities. But most of the herbal formulae have been used for many thousands of years. Cases of severe or fatal poisoning do occur with both Chinese herbal medicines and Chinese proprietary medicines (packaged pills with combinations of drugs for a specific ailment, e.g. "Dr. _____'s arthritis formula"). Both herbal and proprietary medicines have been contaminated with serious toxins and prescription drugs, including heavy metals, steroids, potent NSAIDS and substituted cheaper herbs. The main toxic effects from Chinese medicines are from a few things that are used: podophyllin, aconites and anticholinergic effects from things that are often used in asthma medicines.

There is an example of a Chinese proprietary medicine, Chuifong Toukuwan, called by most of the westerners who used it "black balls from China." The pills look like little gumballs and they were used for arthritis. There is a published report of thirteen American patients taking this for rheumatoid arthritis and they all improved markedly when they were taking it.[21,22] However, then they developed side effects, including ecchymoses, Cushingoid appearance, diabetes, hypertension, arrhythmia, weight gain, and one had compression fracture and one had bone marrow suppression. When the medicine was analyzed, it was found to contain indomethacin, prednisone, small amounts of lead, and aminopyrine (a very toxic substance known to cause bone marrow failure). Also, when the patients stopped taking the first batch and started the next batch, all had a flair of their arthritis symptoms, indicating that they probably received quite different ingredients in the second batch. So it would be wise to caution patients not to take unlabeled, proprietary medicines.

Acupuncture

Acupuncture is based on twelve meridians, or lines of energy, in the body. Acupuncture points lie on the meridians. Meridians don't necessarily follow the nerve pathways. It is clear that acupuncture releases endorphins, and it changes the electrical conductivity of the skin. Whether that has anything to do with whether or how acupuncture works, nobody knows. In the West, acupuncture is primarily used for pain, but in China they use it for just about every illness. The research on it is demonstrating that it may be very useful for a variety of symptoms in addition to pain. The studies are small, and it's been very hard to have adequately blinded trials. It is possible to blind the patient to some degree, but it's been difficult so far to blind the persons delivering the acupuncture treatment.

In the studies so far, the most promising evidence is for acupuncture's role in treating nausea. There is enough evidence that many who have reviewed the studies would say that acupuncture is useful for nausea, especially postoperative nausea. *The Oslo Review on Research in Alternative Medicine* published an endorsement for acupuncture's effectiveness in nausea, chronic pain and post-stroke recovery but found no good evidence for its effectiveness in treating asthma or addiction treatment. The NIH Advisory Counsel on Alternative Medicine, in October 1997, recommends acupuncture treatment as effective for nausea and post-operative dental pain. The *American Journal of Chinese Medicine*[23] had a very good review this year that indicated that well-designed studies really need to be done because so many of the studies published have been poorly done. But there is clearly some positive evidence from some of the better trials that demonstrate that it is probably useful in tinnitus, angina, dry mouth, post-operative pain, migraine, dental pain, dysmenorrhea, tendinitis and low back pain and clear evidence of efficacy in nausea. Research into the mechanism of action of acupuncture is ongoing. Recently, a study using functional MRI imaging evaluated the eye acupuncture points, which are found in the foot. They showed brain activity in the visual cortex when the points in the foot that are used for eye illness are stimulated.

Acupuncture is generally very safe as long as practitioners use disposable needles. (When reusable needles were used, there was hepatitis and AIDS passed to patients.) Today, in developed countries complications are very rare.

Chiropractic

Chiropractic was started by a fellow named Daniel David Palmer in the late 1800s. He had apprenticed to be a M.D., which was a common method used to become a physician before they revised the medical education system and started to make students go to accredited schools. Mr. Palmer thought that there was a flow of Innate Intelligence through the body (which is a lot like ch'i, and the "vital force" of the other alternative disciplines). If there was interference with the flow, patients would fall sick, and cure could only ensue if the practitioner could eliminate the interference. This is accomplished by fixing "subluxations of the spine." This is the basic tenant of chiropractic.

To become a chiropractor, students must go through four years of chiropractic education after at least two years of college and then they are eligible to get a D.C. degree. Chiropractors are licensed in Hawaii. They also have specialization, with the addition of up to three years of additional training. Chiropractic students can specialize in internal medicine, radiology, sports medicine, orthopedics, neurology and nutrition.

There are different kinds of Chiropractors. There are two national organizations and they are called "Straights" and "Mixers" and there is a history of considerable conflict between the two types. Straights make up about 15% of chiropractors, and they are of the more old-fashioned school with the philosophy that **all** illness is caused by spinal subluxations. They consider themselves as primary care physicians, they treat all diseases and promote health with chiropractic manipulations. There are even colleges that include the designation "Straight Chiropractor" in their name to distinguish themselves from "mixers". The Mixers treat mostly back and musculo-skeletal pain, and sometimes may also use diet, herbs, homeopathy, and other treatments and are not purists who will only treat with spinal manipulation. The mixers are a much bigger group and they include the practitioners who just treat back problems with spinal manipulation, and refer everything else to other practitioners.

There is fellow from Hawaii named Kurt Butler who is a quack-exposer. He wrote a book about the dangers of alternative medicine, and he relates the following anecdote: In 1989, he went to twelve chiropractors who advertised free initial evaluations in the Honolulu newspaper. When he saw them, he indicated to each of them that he had symptoms of pressure-like chest pain when he walked with associated shortness of breath, and that he had epigastric abdominal pain at night that woke him up, which was relieved when he ate something and came on when he was hungry. So, he presented to them with symptoms of peptic ulcer disease and coronary artery disease, and yet none of them referred him to a doctor. All of them indicated a plan to treat him with chiropractic manipulation alone.[24]

Studies on the efficacy of spinal manipulation are conflicting, and most of them are of poor methodological quality. But there have been enough studies that have had positive results that the Agency on Health Care Policy and Research in the U.S. has recommended manipulation for acute low back pain, and the British version of our agency did the same.

Koes, et al., in *Spine* 1996, did a systematic review of randomized controlled trials of spinal manipulation for low back pain.[25] They pointed out in this review that this is one of many, and there are probably more reviews than there are actual studies about spinal manipulation for low back pain. They viewed 36 randomized controlled trials and compared spinal manipulation with other treatment. They used a complex methodological scoring system, with 100 being the best and 0 being the poorest. The study with the highest methodological score of all (which happened to be a study by Koes himself) was rated only 60 out of a 100. So, the quality in general is very poor. Of these studies, 53% or 19 of those studies showed favorable results for spinal manipulation. Of the 5 studies that had the top methodological scores (between 50 and 60), 3 were positive and 2 were positive in the subgroup only. There was no clear relationship between the methodology score, and whether the results were positive or negative. For acute low back pain, 5 were positive, 4 were negative and 3 were positive in the subgroup only. For subacute or chronic low back pain, 5 were positive, 2 were negative and 1 was questionable. So there is a tendency for manipulation to appear efficacious. In long term follow-up studies, 6 of 16 had a positive effect after 3 months. The conclusion was that we desperately need better trials.

There have been concerns about the safety of spinal manipulation, especially after a few case reports in the orthopedic journals of spinal transection from manipulation.[26, 27] However, the data available show a relatively good safety record for low back manipulation. There have been some cases of severe adverse effects from cervical manipulation that caused serious concern. However, the rate of adverse effect is low: most sources estimate 5 to 10 adverse events out of every 10 million spinal manipulations. The concern is that if adverse effects do occur, it could be to induce paraplegia, an obviously disastrous effect. One review of cervical manipulation's safety efficacy vs. NSAID-use safety and efficacy concluded that NSAID's efficacy for cervical neck pain has never actually been studied, so there is no efficacy data at all. Cervical manipulation, however, has been studied, and there is some evidence that it is efficacious. When risks were compared, even for serious life-threatening complications, NSAID use is statistically much riskier, probably a 100 times riskier than using cervical manipulation.[26]

Advice about Advising Patients

When advising patients about the use of alternative medicine, there are some opinions that can be given without concern about being inaccurate: one is that conventional medicine's ability to diagnose is clearly superior to any known alternative methods and should be utilized whenever the diagnosis is in question. Second, complementary treatments may have a very useful role when allopathic treatment is insufficient to relieve patients suffering, and when the patient won't accept any conventional treatment that has been recommended. Eisenberg, et al. in *Annals of Internal Medicine*,[28] published an article on how to advise patients on alternative medicine. He states that practitioners should ask non-threatening questions about "other" treatments used to treat illness or to maintain health, and to avoid the words "alternative" or "complementary," or other more pejorative terms (e.g., "unproven"). Only after a complete conventional medical diagnostic evaluation has been done and advice has been given about conventional treatment options, should a detailed discussion about alternative medical treatments be initiated.

Dr. Eisenberg considers the following therapies likely to be **effective**: spinal manipulation for low back pain, acupuncture for nausea, and relaxation therapy for chronic pain and insomnia. He

considered **risky**: spinal manipulation of the cervical spine, some herbs, "patent" remedies from uncontrolled places, restrictive diets, megadose vitamins, IM or IV substances and reusable needles. He considered **very low risk**: homeopathy, most massage, prayer, guided imagery, hypnosis, some herbs, and acupuncture with disposable needles. He advised to watch for indirect toxicity in the form of delay. There is also concern that some of these therapies, particularly prayer and guided imagery, can engender guilt and severe emotional duress because if the therapy fails, the patients can succumb to the idea that they were not "good enough" to get a benefit. Also, practitioners need to alert patients that drug-herb or drug-diet interaction can occur, for example, people on grapefruit diets can induce potentiation of calcium channel blockers, and in particular chemotherapy regimens may be rendered more toxic, or ineffective, due to concurrent use of alternative medicines. It is much preferable if patients are willing to try one thing at a time, so that efficacy can be assessed and to avoid increasing toxicity.

Eisenberg also outlines a step-by-step approach to helping patients try out alternative therapies with their physician's assistance to determine if the treatment has been effective and safe, and he recommend that physicians involve themselves in supporting patients' trials of treatments from a compassionate and evidence-based perspective. He recommends against referral based solely on patient demand, but only when it is part of a rational therapeutic plan. He advises that there are times when we must "agree to disagree," and he ends with the following statement: "No patient should feel that their medical journey is to be taken alone or according to some stealth trajectory, invisible to their conventional providers. The delivery of medical care, like the experience of illness is best viewed as a journey shared".[28]

CAM is a fascinating area of investigation and the practicing physician will need to keep abreast of the literature as studies are published. There is increasing funding support for research in this area, and conventional medical journals are likely to be publishing research about "alternative" practices in the coming years. As our knowledge base grows, it is likely to further blur the line between allopathic and complementary/alternative medicine; making the moniker "Integrative Medicine" a reality.

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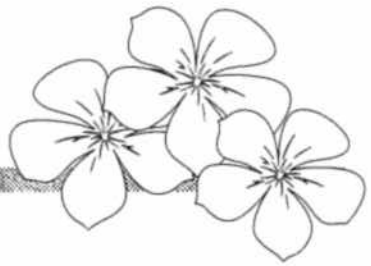

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Occupational Exposures and Knowledge of Universal Precautions Among Medical Students

Sandi A. Kwee MD & Leilani Ka'anehe MD

Purpose- To examine the relationship between occupational exposures and knowledge of universal precautions among medical students. Method: Graduating medical students were given a survey regarding occupational exposures suffered during their clinical rotations. The survey also tested students' knowledge of universal precautions by asking them to indicate what combination of gloves, mask, and eyeshields should be worn to satisfy universal precautions for ten common procedures. Results: At a seminar one week before graduation, 45 senior medical students were given the questionnaire. The response rate was 100%. 84% of the surveyed students suffered at least one occupational exposure during their clinical training. Of those who had an exposure, 42% reported at least once to an exposure center. The mean percentage of correct answers on the protective equipment questionnaire was 71%. No correlation between number of exposures and score on the protective equipment questionnaire was found (r=0.0). Conclusion: Occupational exposures to blood are common among medical students. Few students report to exposure centers. Knowledge of universal precautions may not correlate with reduced risk of occupational exposures among medical students.

Introduction

Accidental exposures to patient blood and body fluids are common among healthcare workers. To address this problem, the Centers for Disease Control introduced universal precautions in 1987. In 1991, the use of universal precautions was prospectively shown to decrease occupational exposures among practicing physicians.[1] In 1992, the American Association of Medical Colleges recommended that medical schools teach universal precautions to students prior to their clinical rotations. At the time, several studies suggested that occupational exposures were common among residents and medical students. A survey at University of Southern California - Los Angeles County found that 71% of surveyed residents and medical students suffered at least one occupational exposure in one training year with only 9% of exposures being reported.[2] Another survey at the University of Washington found that 48% of their graduating medical students had experienced occupational exposures.[3] These statistics are worrisome, and they emphasize the need for efforts directed at reducing occupational exposures among medical students. While most medical schools have implemented universal precautions training, it is still unclear whether knowledge of universal precautions decreases a medical student's risk for occupational exposures. This study sought to explore the relationship between knowledge of universal precautions and frequency of occupational exposures among medical students at the University of Hawaii John A. Burns School of Medicine.

Method

At a seminar one week before graduation, 45 senior medical students were given a questionnaire composed of two parts. The survey was collected at the end of the seminar. The first part of the questionnaire surveyed the number of occupational exposures experienced by students during their 3rd and 4th years of training and the number of times they sought clinical evaluation after an exposure. Occupational exposures were defined as contact with a patient's blood or body fluids via a needlestick, cut, or splash to a wound or mucous membrane. The second part of the survey assessed knowledge of universal precautions. Students were required to indicate what combination of gloves, mask, and eye-shields should be worn to complete each of ten procedures in accordance with standards obtained from Centers for Disease Control recommendations and review of the literature.[4] The ideal responses for each procedure, as listed in table 3, coincide with those from a similar study on universal precautions by Koenig and Chu.[5] The percentages of students who indicated the correct level of protective equipment utilization, under-utilization, and over-utilization were then calculated. The students were also asked attitudinal questions about their universal precautions training. The exposure data was then correlated with the scores on the procedures questionnaire and the attitudinal questions.

Results

100% of the surveys were returned. The sample comprised 87% of the graduating class of 1997 at the University of Hawaii John A. Burns School of Medicine. These medical students had received yearly universal precautions training in the form of problem based learning cases, seminars, and audiovisual presentations as required

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by their curriculum. Students fulfilled most of their clinical rotations at university affiliated community hospitals in Honolulu, Hawaii. 76 exposures occurred among the 45 students. 84% (38/45) suffered at least one exposure (with a range of 0 to 4 exposures). 42% (n=16) of students who had at least one exposure, reported at least once to an exposure center (with a range of 0 to 2 reported exposures). The largest number of exposures occurred during surgery (n=19), obstetrics and gynecology (n=15), and emergency medicine (n=8). All but one of the exposures caused by another healthcare worker (n=15) occurred during surgical rotations. Table 1 lists the number of exposures by rotation. Table 2 summarizes the reasons given by students for exposures.

Table 1. Number of exposures by rotation

Rotation	# Exposures
Surgery	19
Obstetrics and Gynecology	15
Emergency Medicine	8
Internal Medicine	6
Pediatrics	3
Medical or Surgical Intensive Care	6
Dermatology	1
Neurosurgery	1
Orthopedics	1
Family Practice	1
Cardiology	1
Plastic Surgery	1
Endocrinology	1
Rotation not specified	12

Table 2. Reason for Exposure

Rotation	#
Emergency situation	17
Patient moved	16
Carelessness	18
Exposed to body fluid by another health care worker	15
Other (glove broke (x4), instrumentation sharper than expected, in surgery, stuck by attending (2x), sprayed, poor visibility during suturing, pumping blood vessel, unknown, perforated an abscess, poor visibility, blood draw)	13

The mean percentage of correct answers on the protective equipment questionnaire was 71%. The mean percentage of incorrect answers indicating over-utilization of equipment was 10.7%. The mean percentage of incorrect answers indicating under-utilization of equipment was 18.2%. Table 3 lists the procedures and student responses. No correlation was found between the number of correct answers on the protective equipment questionnaire and the number of exposures a student experienced (r=0.00).

89% (40/45) of surveyed students agreed with the statement "I feel that my knowledge of universal precautions is adequate". Agreement with this statement was negatively correlated with the number of exposures experienced by a student ($r=-0.41$, $p < 0.01$). 78% (35/45) of surveyed students agreed with the statement "I feel that I have been given adequate instruction on what to do in the event of a body fluid exposure". Agreement with this statement was negatively correlated with the number of exposures experienced by a student ($r=-0.35$, $p < 0.05$), but not significantly correlated with reporting to an exposure center.

Discussion

Like earlier studies, this study found a high prevalence of occupational exposures among medical students. These findings, while not surprising, should be interpreted in light of several limitations. Since data was collected using a survey instrument, this study may be prone to reporting bias. Students may have under-reported or over-reported exposures. Under-reporting appears unlikely given that students were asked to recall potentially dangerous (i.e. not easily forgotten) events. Students may also under-report out of concern for being identified and placed at risk for negative academic consequences. To allay these concerns, this survey did not solicit personal information. Given the high prevalence of exposures reported in this study, perhaps the students over-reported exposures. The fact that most of the students reported only 1 or 2 exposures, with 4 being the most exposures reported by one student, does not suggest over-reporting. Furthermore, almost half of the exposed students in this study went to an exposure center suggesting that they were concerned enough about their exposure to seek further help and possible treatment. Like earlier occupational exposure studies, this study defines exposures as including both splash and percutaneous exposures. Although the risk of infection varies with the type of exposure, this study made no distinctions regarding the types of exposures suffered. The goal of this study was to assess prevalence of exposures and not risk of infection, and thus it was beyond the scope of this study to assess the seriousness of exposures. Hopefully, future research will address these matters.

Among our respondents who had an exposure, less than half reported to an exposure center. Prior studies have also found low rates of reporting among medical students.[2,3] Under-utilization of exposure centers is a concern since post-exposure treatment is available. For example, post-percutaneous exposure treatment with zidovudine has been shown to reduce HIV transmission by 79% and current guidelines contain recommendations for combination antiretroviral regimens.[6] While not all exposures require treatment, it is uncertain whether students are capable of assessing their need for post-exposure treatment. Thus, universal precautions training should emphasize prompt exposure reporting and the possibility of post-exposure treatment.

One recent study by Koenig and Chu[5] suggests that despite universal precautions training, many medical students do not know what protective equipment should be worn to be in compliance with universal precautions. Our study, which also assessed knowledge of protective equipment use, reproduces their findings. For several procedures, half of the students underestimated the recommended level of protection. Admittedly, the guidelines used to determine the correct level of protection in these studies were based on conservative recommendations. In practice, there is no universal agreement across different institutions regarding what protection is necessary

Table 3. Numbers and percentages of 45 fourth-year medical students indicating correct, excessive, and inadequate use of protective equipment for ten common procedures. (*No response was indicated on one survey for this procedure)

Procedure (and correct response in parenthesis)	Correct level of protection No. (%)	Excessive protection No. (%)	Inadequate Protection No. (%)
Drawing blood (gloves)	35 (78%)	10 (22%)	0
Suturing (gloves, mask, and eyeshields)	24 (53%)	0	21 (47%)
Coughing patient. (mask)*	17 (39%)	18 (39%)	9 (22%)
Handle Specimens (gloves)	41 (91%)	3 (7%)	1 (2%)
Suctioning Airway (gloves, mask, eyeshields)	21 (47%)	0	24 (53%)
Endotracheal Intubation (gloves, mask, eyeshields)	33 (73%)	0	12 (27%)
Gastrointestinal lavage (gloves, mask, eyeshields)*	33 (75%)	0	11 (25%)
Inserting intravenous lines (gloves)	34 (76%)	11 (24%)	0
Casual contact (no protective equipment required)	43 (96%)	2 (4%)	0
Examining non-intact skin (gloves)	37 (82%)	4 (9%)	4 (9%)

for certain procedures. Thus many students may have seemingly underestimated the protection required because the guidelines of their institution did not recommend equipment deemed necessary by more conservative guidelines. Nevertheless, the fact that many students suffered occupational exposures suggests a need for all institutions to adhere to a validated and universally accepted protective equipment guideline.

This study found that students who felt they knew universal precautions well or knew what to do in the event of an exposure suffered fewer exposures, although they did not score better on the knowledge questionnaire. This may suggest that other aspects of universal precautions training, apart from teaching appropriate protective equipment usage, is beneficial. Since retrospective studies cannot confirm causality, an equally plausible explanation is that students who suffered fewer exposures were more confident about their knowledge of universal precautions.

Current attempts at exposure risk reduction have been directed at developing effective universal precautions training programs. Unfortunately, no study has clearly demonstrated that medical students benefit from universal precautions training. One recent survey of matriculating interns at five university affiliated hospitals found no correlation between universal precautions training and the risk of needlestick injuries, rate of exposure reporting, or completion of a hepatitis B immunization series.[7] Our study also did not find any correlation between universal precautions knowledge and number of occupational exposures among medical students. One recent study did show that medical students who scored well on a universal precautions questionnaire were less likely to suffer splash exposures, but those students still had an alarming exposure prevalence of 46% after one clinical year.[8] Thus, no study has clearly demonstrated a large benefit from teaching universal precautions to medical students. Therefore, future efforts should not only be directed at refining universal precautions training, but also at developing other measures to protect students. Given the high prevalence of occupational exposures among medical students, more study is also needed to clarify the risk factors for exposures in this group so that specific interventions may be developed.

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WHO ARE YOU, WOMAN

by Robert S. Flowers

Who are you, Woman,
After all of these years,
Beyond whom I sleep with
And sometimes share tears?

Who are you, daring
To lie at my side —
To mother my children —
One of whom died?

Who are you, Precious,
Confidante, friend —
Wife, Lover, Partner —
A sweet awesome blend?

Who are you, sharing
These children you bore,
Carrying another
Whom we just might love
more?

*

You're all sorts of things —
Some mentioned above,
But know that to me
You're far more than love.

MORE BEAUTIFUL

by Robert S. Flowers
for my expectant wife, Susan

Your beauty has changed - perhaps you know —
The way you smile and your radiant glow.
Your body's lines have changed a bit
So your thin waisted clothes no longer fit.

Your silhouette has a new contour —
A different style with a different allure.
Your beauty now has an awesome impact,
That contains all the force of the Creative Act.

Your enlarging womb with it's convex curves
Excite my senses and Optical Nerves.
Your high full breasts preparing for milk
Have a texture reminiscent of the finest of silk.

You can have that old style of svelte and thin.
I prefer your curves with the joy within!
There's a whole new life you have in store, And
you're much more beautiful than ever before!

News and Notes Henry N. Yokoyama MD

Life in These Parts

Our Patient, F.Y. (in her 70's) volunteers at Kuakini Medical Center. She was walking down to Fort Street Mall for a Burger King lunch when a 50's Caucasian man dressed in shorts, t-shirt and shaggy hair asked her for a handout: "Can you spare 25 cents for coffee?" She countered, "You can't get coffee for 25 cents. Here's a dollar" and feeling sorry for the stranger, she invited him to come in and have lunch on her. He accepted her offer, but then he asked her to sit while he got the lunch instead...

"I thought you were broke?" F.Y. said. He bought lunch for two and explained...

" I'm president of a firm in Chicago. I heard there were very few homeless in Hawaii and I was checking out the report."

After lunch, he produced a bill fold with 100 dollar bills, gave her five bills and his name card. F.Y. was too flabbergasted to refuse the offer...

A three year $1.79 million study will investigate the possible links of degenerative brain diseases (e.g. Parkinson's) and exposure to environmental toxins. The funding was announced by Senator Inouye and assigned to the Honolulu regional office of the U.S. Department of Veterans Affairs and the Pacific Health Research Institute. Dr. G. Webster, UH Med School associate clinical professor will lead the research project of Japanese-American men who joined the Honolulu Health Program in 1965. More than half of the original 8,000 subjects have died. UH epidemiologists Drs. David Morens and Andrew Grandinetti will be associated with the study. Morens and Dr. Jim Davis (also with UH Med School) have published their research which seems to indicate that people who eat foods high in Vit E have a lesser risk of developing Parkinson's.

News Briefs

A $10,000 poll of 400 Hawaii voters sponsored by a pro-marijuana group reveals that 38% strongly supported the use of marijuana for medical purposes; 25% somewhat supported its use; 21% were strongly opposed, and 7% somewhat opposed; while 10% did not know. 41% strongly supported farmers growing and selling marijuana; 18% somewhat supported this. 15% were strongly opposed; 9% were somewhat opposed and 18% did not know...

University Health Alliance has signed a contract with Rx America LLC based on Salt Lake City. Rx America is owned by Long's Drug Stores, Inc. and American Drug Stores, Inc.

Coordinators for PLCO Trial (Prostate, lung, colon and ovarian cancer trial) are recruiting 1,700 more participants (ages 55 to 74) to meet the Hawaii quota of 10,000. Lance Yokochi, is principal investigator.

Russell Stodd's Aloha Surgery Center, and outpatient surgery center with three operating rooms, will be available by early January. (Maui News)

State auditor Marion Higa feels that physician assistants should be licensed to prescribe drugs (including controlled substances.)

Protest

(Excerpts from Malcolm Ing's letter to the editor, Honolulu Star Bulletin, November 13, 1998)

"The original HMSA partnership created in the 1940's by physicians and administrators has given way to a big business mentality..."

"Physicians are now being paid at the lowest possible level and have received notice from HMSA of another 4.5% pay cut for surgical procedures..."

"Local hospitals have received notices from HMSA that future reimbursements for care will be decreased..."

"All the while, the surplus income that is derived by HMSA premium payments is accumulating in the 'millions for investment' purposes..."

"Meanwhile, members are kept happy by being informed that there won't be any premium increase for the next period..."

Dissenting Voices

(Quotes from nonconcurring opinions in the blue ribbon panel's final report, Catholic Herald June 1998)

"The present incompetence of our health delivery system in respect to end of life care should not be corrected by legalized killing."

Brian F. Issell MD Director, Cancer Center of Hawaii

"I strongly believe in providing adequate medical treatment, which include pain relief and alleviation of suffering at the end of life, but I do not believe entrusting physicians with the authority to assist killing a person should be a part of the healing profession."

Naleen N. Andrade MD, Psychiatrist, Queen's Medical Center

"This is primarily an issue of social justice. Until we have taken away as many layers of social inequality as possible, have enhanced our practices of communication, and have broadened our understanding of death and dying, I believe the option for physician assisted suicide and death is too vulnerable to these inequalities."

Rev. Beth Donaldson, Kapaa United Church of Christ

"The very fact that physicians often have great power and can exert substantial influence on the decisions of a patient require that much caution be exercised before recommending physician assisted suicide and death be legalized. I am not sure that Hawaii is ready to embrace the concept of physician assisted suicide and death as a form of medical practice.

James Pietsch Attorney Director, Elder Law Project

Miscellany

During my annual eye examination, I noticed a sign in my ophthalmologist's office stating that he was now affiliated with a prominent HMO. Throughout the checkup, I questioned him about the pros and cons of managed care.

When the exam was complete, the doctor handed my papers to a secretary and said, "Mr. Pripstein here is a member of our HMO."

"No, no," I corrected him. "I was just inquiring about HMOs. I don't belong to one."

"You don't?" he said with a laugh. "Well then, come back into the examining room and I'll take a look at your other eye!"

A policeman at the scene of a car accident was helping one of the drivers out of a damaged car and asked, "Are you seriously hurt?"

"How should I know?" the driver responded tartly, "I'm a doctor, not a lawyer."

Potpourri

A doctor, an engineer and a lawyer were arguing over whose profession was the oldest. "On the 6th day, God took one of Adam's ribs and created Eve," said the doctor. " So that makes him a surgeon first."

"Please," said the engineer. "Before that, God created the world from chaos and confusion, so he was first an engineer."

"Interesting," said the lawyer smugly, "but who do you think created the chaos and confusion?"

Question: "What's the difference between your first honeymoon and your second?"

Answer: "The first, Niagara; the second, Viagra."

Two Eulogies

Chew Mung Lum, age 76, was eulogized on January 5 at the Community Church of Honolulu: Chew Mung, physician athlete, scholar, beloved father, husband, and grandfather, who was adored by colleagues and patients alike had scribbled the following tenets on a notepad: "Nothing worth doing is completed in our life time...Therefore we must be saved by hope...Nothing true or beautiful or good makes complete sense in any immediate context of history; therefore we must be saved by faith...Nothing we do, however virtuous, can be accomplished alone; we are saved by love." Hope; faith; and love.

Herbert Suguru Takaki, age 97, was eulogized on January 14, at the Honpa Hongwanji by his long time golfing friends of the Mid Pac Country Club. Dick Omura was the master of ceremonies, Lionel Furukawa and Masaru Koike offered group incense and medical historian Mike Okihiro recalled Herbert's evolution: an immigrant youth from Haleiwa matriculating at McKinley High School, U of Chicago (where he was NCAA bantam wrestling champ for 3 years) and Rush Medical School and practicing medicine and surgery until age 86 before retiring. (Herb took up golf in his 60's and last shot his age at 91 at Mid Pac CC...which is all the more remarkable because he was blind in one eye, smoked six packs/d with endless cups of coffee and scoops of ice cream...Besides his mastery of judo and kendo, he had a voice that rivaled Caruso...How well do we remember.)

Health News Briefs

A Veterans Administration study released in November at the American Heart Association meeting in Dallas shows that gemfibrozil given to 1,264 men with low HDL (31.5) raised the HDL just two points, but after 5 years, only 17% of the patients had MI's compared to 21% of the patients on placebo.

About 10% of the people who took the diet drugs Redux and fen-phen had mildly leaky heart valves, and serious heart problems were rare according to a new analysis. Also, the latest evidence hints that the valve problems may gradually go away after stopping the drugs. At least 13 studies have looked into the problem. (Reports at the American Heart Association meetings in Dallas)

A Mayo Clinic study in Finland since 1995 of a margarine called Benecol (containing a plant stanol ester) lowered LDL 14%. The product is being introduced in the U.S. by McNeil Consumer Products and marketed under the name Benecol in January. Another margarine product called Take Control containing a cholesterol-lowering plant sterol will be introduced in February by Lipton.

Youth Elixer

Human growth hormone or hGH is being promoted as the latest youth elixer, although there's been too little research and the drug could be a risky, high priced snake oil. Dr. Adrienne Denese, a Manhattan Upper East Side rehabilitative therapist, has been taking the drug over a year and her "skin is flawless as porcelain and her body tight as a drum...She is over 40 and could easily pass for someone in her 20s."

The National Institute on Aging reported last year that too much hGH can result in diabetes, joint pain, high blood pressure and carpo tunnel syndrome and that there is no proof that any supplement works as an antiaging remedy. Until recently hGH was taken mainly for developmental disorders such as dwarfism. Dr. Huber Warner, acting associate director if the National Institute of Aging's biology of aging program in Bethesda, Md says only a small study conducted in 1990 by Dr. Daniel Rudman showed potential benefits of hGH. "The study of 12 men aged 61 to 81 took hGH for six months and had increased muscle mass, a decrease in flab and tighter skin. Some of the men had breast enlargement." Proponents say moderate doses of hGH are safe. Klatz says his Academy was founded by a dozen doctors in 1993 and now has more than 4,000 member physicians in 37 countries.

Potpourri I

Joe suffered from excruciating headaches. The doctor told him only castration will cure his headaches. "You have a rare condition that causes pressure to build up against your spine" he explained. Joe was shocked, but had the operation.

When he left the hospital, Joe was depressed, so he stopped at a men's shop for a new suit. The salesman eyed him and said, "44 long?"

"That's right," Joe said. He tried the suit and it fit perfectly.

"How about a new shirt?" the salesman asked. "Let's see, a 34 sleeve and $16^{1/2}$ neck ought to do it."

"Right again," Joe said. "You're simply amazing."

"While we're at it, how about new underwear?" the salesman suggested. He eyed Joe's waist and said, "Size 36."

"Nope, you finally missed one," Joe said, chuckling. "I wear size 34."

"You couldn't possibly," replied the salesman. "Underwear that tight would create a great deal of pressure against your spine and cause one hell of a headache."

Two guys were chatting at a cocktail party. "Your wife certainly brightens the room," one said to the other. "Her mere presence is electrifying."

"It ought to be," the other man replied. "Everything she's wearing is charged."

Conference Notes

"Minimally Invasive Cardiac Surgery"
by Jeffrey Lee, Queen's Medical Center, Friday, December 11, 1998.

Introduction:
a. PTCA: 434,000 in US/yr...25-30% restenosis within 6 mos; coronary stents improve results.
b.CAGB: c. 800,000 world wide/yr

CABG: Old & New: Traditional CABG
Minimal Invasive CABG:
a. MIDCAB: LAD only;
b. *OPCAD: All vessels with sternotomy...

Cost Comparison:
a. PTCA (c̄ stent) ($18,000-$22,000)
b. MIDCAB ($13,000) "The beauty of MIDCAB's is its simplicity and safety."

Problems c̄ CABG: 3.1% incidence of strokes;> Age 70: even higher incidence
Neurocognitive Dysfunction2° cerebral microemboli with traditional CABG: (8 d = 70%; 8 wks = 40%; 1 yr = 30%)
Comparison OPCAB vs Traditional CABG: (May - Dec 28, 1998 SFH)

	OPACB	Traditional CABG
Intubation	3.2	8.8
LOS	4.7	6.3
Atrial Fib	38%	41%
Mortality	0	2/50
CXR	354	440

Intraoperative Transcranial Doppler Results (Microemboli to brain)

ASHD	PTCA CABG	CABG	OPCAB I	OPCAB II
1200	1600	1400	0	0

Hematological Problems: CABG>OPCAB
Red cell mass determines transfusion need.
RBC Mass = wtg x 7% = Hct

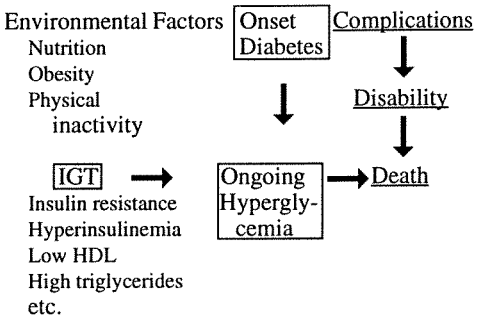
RCB Mass	<1.8	>1.8
Transfused	83%	17%
No Transfusion	26%	>4%

If RBC mass <1.8 liter → 56% transfused
If RBC mass >1.8 liter → 6.6% transfused
Early MIDCAB and OPCAB graft patency rates are equivalent to CABG patency rates.
*OPCAB = Off-Pump Coronary Artery Bypass

"Hyperlipidemia in Diabetes"
by Willa Hsueh, UCLA, January 5, 1999. Sponsored by Merck.

Diabetics have 2 to 4 times more risk factors...
Insulin Resistance or Cardiovascular Metabolic Syndrome (Former Syndrome X)
a. Insulin resistance b. Hyperinsulinemia
c. Low HDL d. High VLDL triglycerides
e. HTN f. Glucose Intolerance
g. Elevated PAI-1 h. Increased visceral fat
i. Hyperuricemia j. High small dense LDL

Genetic Susceptability



LDL Level in Diabetics: ADA recommends LDL 100 (Since diabetics have 3 times more CHD, all diabetics should maintain LDL of 100 or less)

Target BP's (Results of 45 Study)

Hypertensives:	140/90
Diabetics:	130/85
Proteinurea:	120/75

ABCD Trial (Aborted) when incidence of MI's: 25 (Nisoldpin) vs 5 (Enalapril)
FACET Trial: Amlodipine (greater incidence of strokes and MI's) than Fosinapral

"Migraine Update" by VP Lawrence Neuman, Queen's Medical Center, September 4, 1998

Epidemiology: Prevalence 23.4 $x10^6$; female = 3x male; 18% of US females; 70 - 90% = familial. Diagnosed: 29% of males; 41% of females; undiagnosed 71% of males; 59% of females; "This disorder won't kill you, but...; Mis diagnosed as tension HA; "sinus HA" "It's all in your head..."

Pathophysiology: Vascular theory; Neural; Unified or Neurovascular; Serotonin (5-HT) Neurotransmission...

Diagnosis: Sy's & Sx's organic disease; extremely rare; sudden onset; new severe HA; Most severe HA experienced; progressively worsening HA; Onset with exertion, coughing, sexual activity (subarachnoid hemorrhage); Drowsiness, confusion, or memory loss.
*Sexual HA's: Treat with BB
Chronic malaise, myalgia, arthralgia
Fever
Progressive visual disturbance
Weakness, clumsiness
1st HA after age 50
*Migraine without aura ia the common migraine.

Five Phases of Migraine: a. Prodrome b. Aura (only 10% have aura) c. HA d.HA termination e. Postdrome

Phase I (Prodrome) a. Hyper or hypoactivity (Heightened sensory perception) b. Irritability c. Depression d. Food craving e.g. for chocolates e. Repetetive, insomnia f. Fluid retention

Phase II (Aura) a. Scotoma b. Photophobia c. Visual distortion and hallucinations d. Fortification e. Drowsiness f. Unpleasant smells g. Scintilating scotoma (Most common)

Phase III (HA) a. 4-72hrs b. Throbbing c. Worsens with activity d. Frontal & temporal e. Edema f. N & V g. Scalp & pericranial tenderness h. ↑sensory perception i. Hibernation

Phase IV (HA Termination)

Phase V (Postdrome)

Common Precipitating Factors:

Menstruation	stress & worry
Oral contraceptives	certain foods
Glaring lights	lack of sleep
Exertion	change in weather
Fatigue	hunger

Ddx Migraine HA	vs	Tension HA
one side		both sides
vomiting		no vomiting
insomnia		no insomnia

Ddx	Migraine	vs	Cluster HA
	female		male
	25%		1%

Treatment Migraine
Myth: re treatment response
Fact: Always establish dx before Rx
Treatment response does not necessarily correlate with etiology of HA
Misdx may lead to fatality

Acute Medications in Symptomatic Migraine
Over the counter: Tylenol, ASA
Analgesics: barbiturates, analgesics, etc.
NSAIDS
Antiemetics, phenothiazines

Migraine Specific RX: Ergotamine tartrate; dihydroergotamine; Isomatheptene; acetaminophen, dichoral phenozene; sunatriptan (Imitrex)

	Onset
Imitrex Injectable (6 mg)	10"
Imitrex Nasal Spray (20mg)	15-45"
Imitrex tabs (25mg)	60-90"

Colmitripan
Naratriptan tab 1mg 2.5mg
Migrainal Pump Nasal Spray

Beta Blockers:
Inderal (Inderal LA) 40-320mg/d
Naldolol (Corgfard) 40-240mg/d

CaCB
Tricyclics: Nortriptiline 10-150mg/d
Amitriptyline 10-30mg/d
SSRI's: Paxil esp irritable bowel syndrome
Anticonvulsants: Divaprovex Na 500-300mg/d;
Sansert (Methysergide 2-8mg/d

Potpourri II

A panda walked into a restaurant and ordered a sandwich and a drink. When he finished, he pulled out a pistol and shot up the place scaring customers and breaking dishes, glasses and liquor bottles before turning to leave. Shocked, the manager said, "Hey, where are you going?"

The panda glanced back over his shoulder and said, "I'm a panda--look it up," before disappearing out the door.

The bartender pulled out a dictionary and found an entry for "panda." The definition read, "A tree dwelling animal of Asian origin characterized by distinct black-and-white markings. Eats shoots and leaves.

The boss called an employee into his office. "Bob," he said, "you have been with the company for a year. You started in the mail room, one week later you were promoted to a sales position, and one month after that you were promoted to district manager of the sales department. Just four short months later, you were promoted to vice president. Now it's time for me to retire and I want to make you the new president and CEO of the corporation. What do you say to that?"

"Thanks," said the employee.

"Thanks?" the boss replied. "Is that all you can say?"

"I guess not," the employee said, "Thanks, Dad."

Re Vitamin E

(From a Reader's Digest Article by Anita Bartholomew)

A. National Institute on Aging: (11,000 people age 65 and older on Vit E)
a. 41% less risk of dying of heart disease
b. 21% lower risk of dying from all causes.

B. Other Studies:
a. Prevent atherosclerosis (fewer heart attacks and strokes)
b. Limit damage from smoking
c. Boost immune response
d. Ease arthritic sy's
e. Delay Alzheimers.

C. Vit E Boosts Immune System:
Tufts University study: 200 IU better than 60 IU and 800 IU

D. Vit E Cuts Cardiac Risk:
Dr. Ishwarlal Jialal of U of Texas Southwestern Medical Center studied 21 healthy people on 200 IU/d for 8 weeks and reported:
a. Vit E reduced oxidation of LDL
b. Vit E prevents atherosclerosis

E. Vit E Might Fight Cancer:
a. National Cancer Institute supported study of 29,000 adults in China:
One group on Vit E, Beta carotene and selenium showed significant reduction in cancer and cancer mortality.
b. 27,000 Finish smokers, ages 50 to 69 were on 50 IU vit E:
Reported 32% fewer prostate cancer and 41% fewer prostate cancer deaths Other studies are testing Vit E on colon, lung and breast cancer.

F. Vit E May Slow Alzheimer's.
a. A 2 yr study by the National Institute of Aging (341 people with moderate Alzheimer dementia) Research at 23 centers: Selegiline (a Parkinson's disease drug) or Vit E delay deterioration by 71/2 mos (compared to placebo)

G. Caution re Vit E: Safe for most people (up to 1000 IU's) but: Vit E, like ASA are blood thinners: Therefore don't take prior to surgery or if on anticoagulant drugs. Avoid with hyperthyroidism or rheumatic heart disease.

Don't Sweat the Small Stuff

by Richard Carlson, Phd
Make peace with imperfections...

Let go of the idea that gentle relaxed people can't be super achievers...

Be aware of the snow ball effect of your thinking...

Remind yourself that when you die, your "In Basket" won't be empty...

Do something nice for someone else...And don't tell anyone about it....

Continued on Next Page, 3rd column

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- HOW liability policies often leave you with no coverage.
- HOW your childrens' college tuition can be paid with before-tax dollars.
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- HOW building home equity may not be the best investment in order to reach your retirement goals.

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City: _____ State: _____ Zip: _____

Don't interrupt others or finish their sentences...

Let others have their glory...

Learn to live in the present moment...

Imagine that everyone is enlightened except you...

Let others be right most of the time...

Become more patient...

Ask yourself the question, "Will this matter a year from now!"

Surrender to the fact that life isn't fair...

Allow yourself to be bored...

Lower your tolerance to stress...

Once a week write a heartfelt letter...

Imagine yourself at your own funeral...

Classified Notices

To place a classified notice:
Please call 536-7702. HMA members may place a complimentary one-time classified ad in HMJ as space is available. Regular and non-member rates are $1.50 a word with a minimum of 20 words or $30. Not commissionable. Payment must accompany written order.

For Sale

For Sale.– Portable Gomco suction machine, with stand $150, without $120. I.V. pole $30, Mayo stand $50, extra tray $20, oxygen cylinder with cart and meter $175, Vernitron autoclave $750, '91 Lexus LS 400 $16,900. 671-5055 or 525-3600.
For Sale.– USED DIASONIC SONOgram in good condition, $2,500/OBO, including 3.5MHZ transducer.

Office Space

Pearl City Business Plaza.– Tenant Improvement Allowances for Long Leases; 680+ sq ft; 24-hr security; free tenant/customer pkg; Gifford Chang 581-8853 DP, 593-9776, 531-3526.
Kailua-Kona.– Lease space available, 795 sq ft, ground floor next to OB-GYN. Improvements for long lease. Property Network, Ltd., (808)329-9300.
Queen's Physicians Office Building I.– Prime location; P/T, F/T space available to share; Call 537-9595.

Misc.

Mask & Glove Relief.– Sensitivity barrier gel reduces irritation from latex, nitrile, polyethylene face masks & gloves. Free evaluation sample to USA physicians (1 per office). Sahara Cosmetics Oahu 808-735-8081, USA toll free 1-877-280-2020, record complete delivery address.

The Weathervane Russell T. Stodd MD

The Best Thing Ever to Come Out of Religion was the Music.

J. James Rowsey, MD past chairman of the University of South Florida ophthalmology department is a true believer. During his six year tour as department chief he was in regular communication with the Heavenly Father. Nothing wrong with that, of course, except that Dr. Rowsey's fundamentalist Christian theology spilled over into his medical business. He started faculty meetings with a prayer, and gave lower evaluations to nonbelievers who arrived late. He hired "born-again" Christian doctors at higher salaries and provided them with better equipment and work space. He demoted or fired staffers who were not in his "religious camp". Some faculty members strongly believe that university officials knew about the matter, but kept Dr. Rowsey on board because of his fund-raising abilities. The university Director of Health Science Public Affairs did not contest that Dr. Rowsey's behavior was inappropriate (where have I heard that word before?), but claimed the issue is more complicated, and further stated that the school had to be careful not to tread on the doctor's First Amendment rights. He claimed that no solid evidence showed that religious discrimination took place. Nevertheless the university settled one doctor's claim for violation of civil rights to the tune of $125,000, and two similar suits are pending. Dr. Rowsey stepped down as chair in October 1997, but has tenure so dismissal is practically out of the question.

Youth Thinks Nothing of Health, and Age Thinks of Nothing but.

The latest issue of Ophthalmology reported that among 750 patients with cataracts, those who took vitamin E cut the further development of cataract by 50%. An accumulation of scientific data reveals that vitamin E may be that magical fountain Ponce De Leon was searching for. It reduces the risk of developing heart disease, minimizes skin damage like scarring, sunburn, and liver spots. It appears to improve athletic and sexual performance, increases lung capacity, and also may diminish memory loss due to aging. A report in the Journal of National Cancer Institute found that taking 75 international units per day reduced the risk of dying from prostate cancer by 41%. A JAMA study published last year found that when healthy older adults took 300 IU a day for four months they had a two-thirds boost in immune function. A 10 year study by the National Institute on Aging found that among 11,000 subjects over the age of 67, those who took vitamin E cut the risk of dying from any cause by one-third!

Peer Review is Confidential — Expect When the Court Says it Isn't...

A woman with a ruptured ectopic pregnancy was initially examined by the emergency room nurse. She failed to recognize the seriousness of the problem, and did not alert the ER physician. Due to the delay, the patient died. The hospital's peer review mechanism evaluated the event, and disciplined the nurse. The State Board of Nursing investigated the case, obtained hospital documents, and charged the nurse with professional incompetence. The family filed a lawsuit charging the nurse with negligence, and when the plaintiffs' attorneys subpoenaed the Board's files, they were given copies of the hospital documents. The hospital claimed their forms were protected under the law regarding peer review, and the district court agreed. However, on appeal the Supreme Court overruled that decision, stating "forms and documents containing factual accounts and witnesses' names are not protected simply because they also contained the peer reviewer's conclusions."

A Hypocrite is a Person Who.....But Who Isn't?

For almost 20 years, NBC's Today Show featured Dr. Art Ulene, USC School of Medicine obstetrician and gynecologist. He offered on-the-air medical advice and became one of America's most recognized and trusted physicians. In times past he advised against vitamin supplements on the Today Show, stating that research didn't justify taking them. But now the trusted doctor has seen the light. Departing the NBC show months ago, he is now seen in national television spots coming on with a message that sounds like a public service announcement. "Medical Research" has proved him wrong, and he is pitching his own line of vitamin supplements, such as Dr. Art Ulene 's Optimal Formula! for Women. Many medical educators are angry, stating that it's a tremendous conflict of interest, and that he now sounds more like an advertising agency person. Dr. Ulene sees no conflict, but happily says his product line is now in 23,000 stores and selling so well that his company plans to launch other lines of Dr. Ulene nutritional products.

What this Country Needs is a Good Five Cent Cigar Extinguisher.

In the town of Sete, France, a multidisciplinary study involving epidemiologists, ophthalmologists, and biologists was conducted on 2,584 residents age 60 years and beyond. After adjustment for age, gender, cardiac disease and diabetes, current smokers had a 3.6 fold increased risk of late age related macular degeneration (AMD) compared to nonsmokers. Former smokers had a 3.2 times increased risk. Phillip Morris, R.J. Reynolds, Brown and Williamson, P. Lorillard, and their friends in the scandalous tobacco combine, drive one more stake into the heart of good health. And now, trendy magazines and television shows have attractive young people, especially beautiful women, puffing on havanas and claros. Another disturbing part is that the recent acceptance of the damage settlement with various state governments does not come near the costs incurred in caring for patients with the multiple medical problems directly attributable to the noxious weed. Despite the overwhelming evidence and the immense cost to patients and families in coin and emotion, state attorneys general opted for a quick buck. After all, to actually bring the complaint would involve work. The tobacco companies got away cheaply, displayed no remorse, and will continue their disgraceful promotional activities.

People Shouldn't Complain About the Cost of Medicine: Even the Latest Wonder Drug Costs no More Than the Cheapest Lexus...

As every physician knows, many elderly patients have monthly drug bills of several hundred dollars, while members of some plans pay much less. To address this dichotomy, Representative Tom Allen of Maine introduced a bill in late September which asks Congress to give Medicare recipients the same discounts on prescription drugs which are currently afforded to "favored customers," of the drug industry, which includes members of big HMO organizations and federal government agencies. The favored companies get discounts of as much as 60%, which means that outsiders pay twice as much for their prescriptions. The pharmaceutical houses let out a collective scream, and have mounted a massive lobbying blitz to kill this bill. They fear that the public is becoming increasingly outraged at high drug prices, and claim they would lose the revenue needed for research. The bill would cost taxpayers nothing. Merck's lobbyist has called on both Democrats and Republicans to kill the bill, saying "It does not deal with providing coverage or quality of care. Seniors need a proposal that provides coverage and improves care." In other words, make the taxpayers balance the issue, and let the drug industry continue to harvest their huge profits.

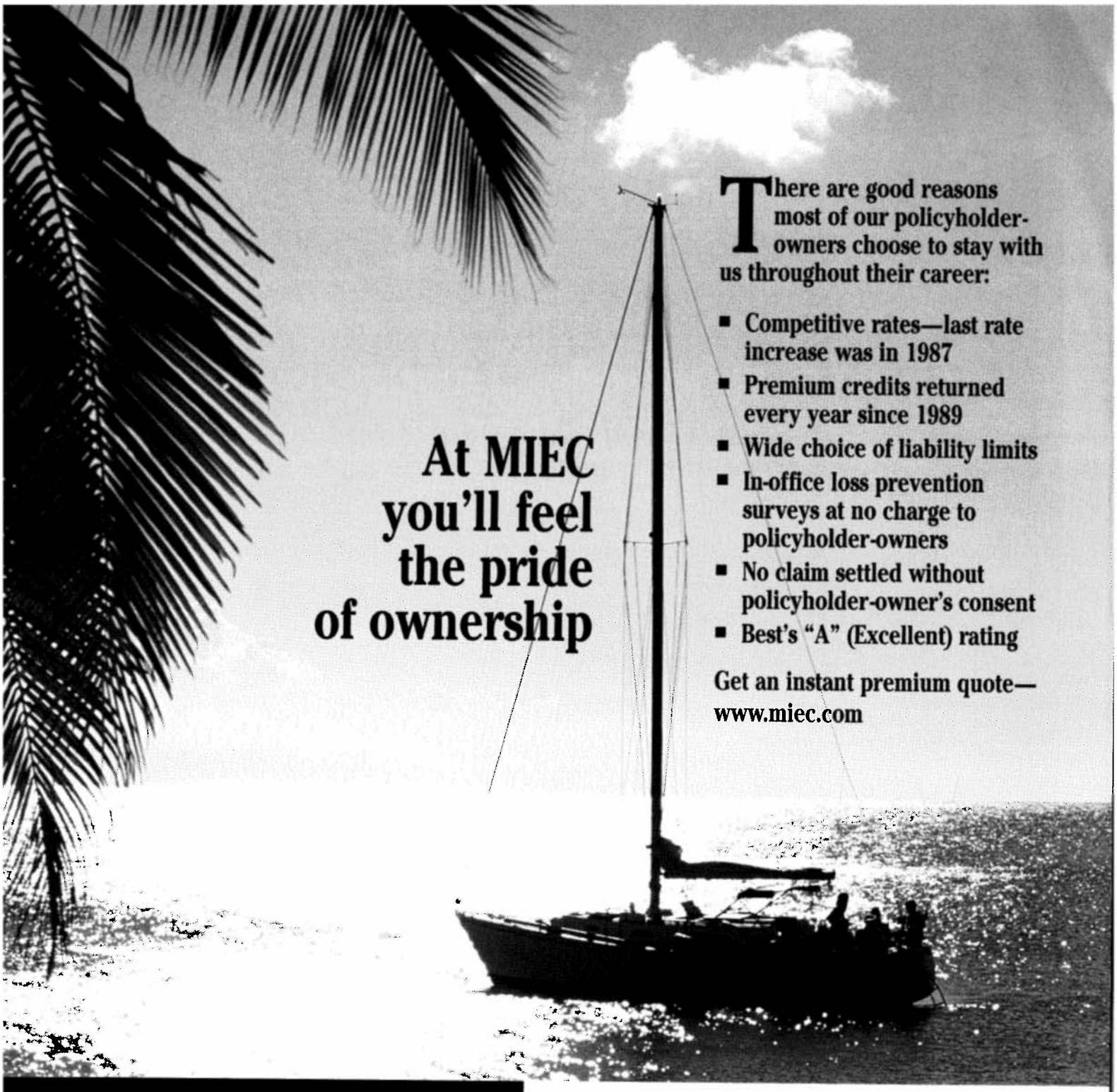
Y2K, A Clever Way to Say AAUUGH!!

The House Government Reform and Oversight Committee evaluated the Health Care Financing Administration regarding computer readiness for the year 2000. HCFA was given an "F," and the agency requested $141 million to remedy the failure. In the meantime HCFA decided to delay proposed Medicare payment changes to ambulatory surgical centers until after the year 2000 as potential protection against the SNAFU. If the agency fails to head off the computer glitch, Medicare reimbursement could drop 100% in about one year.

Addenda

- Otters can get herpes.
- 46% of Americans say they're being left behind by "technology."
- In 1920, the average check at a diner was $0.28.
- Cowhand -- an orthopedic malady common among dairy farmers.

Aloha and keep the faith — rts ■



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