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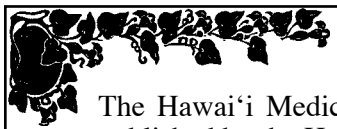

The Hawai'i Medical Journal is a monthly, peer-reviewed journal published by the Hawai'i Medical Association.

The Journal's aim is to provide new, scientific information in a scholarly manner, with a focus on the unique, multicultural and environmental aspects of the Hawaiian islands and Pacific Rim region.

HE MANA'O:
THOUGHTS FROM THE EDITOR

The Evolving World of CME

As western-trained physicians, we offer our patients the background of a consonant, heavily prescribed education, the path for which begins for many of us in high school. Unlike some other traditions of healing around the world, physicians should be expected to render similar care to our patients, and as is referenced in the Hippocratic Oath, seek consultation when appropriate to maximize that care. The consultation process, and the more general way we interact with our colleagues, is again fairly well prescribed within the field of medicine. We learn this pattern in medical school, and it is reinforced in our post-graduate training. In fact, as those of you who participate in the John A. Burns School of Medicine are aware, this behavior, and professional group interaction as taught in the Problem Based Learning Curriculum, may be as important as the medical knowledge that we acquire in our undergraduate and post-graduate medical training.

S. Kalani Brady MD, MPH, FACP
Editor, Hawai'i Medical Journal

Numerous studies, as well as our own personal experiences, show that many of the "facts" that we learned in our formal training are overturned with new scientific studies, the foundation of the care we render to our patients. I clearly remember that it was considered malpractice to prescribe beta-blockers to a patient in congestive heart failure in the early 1980s, and is now considered standard of care with the data we now have published. Hence, it is crucial to maintain current clinical competence to maximize our patients' care. The American Board of Medical Specialties has generally abandoned life certification in favor of time-limited certification, with the intent to compel physicians to maintain current clinical competence. Part of this maintenance of certification will be demonstrating to the specialty board that our continuing medical education (CME) is appropriate to our individual practices.

Apropos to this concept, the Accreditation Council for Continuing Medical Education (ACCME), the body which accredits all CME in the North American continent (approximately 2500 providers), is evolving in its emphasis on the type of CME individual physicians should seek to maintain their clinical competence. (Lest we independent doctors rankle at the limitation of our choice of our CME, we only need question ourselves how many electives we were offered during medical school, or how many elective months we were able to choose during our post-graduate training. Physicians, as a body of colleagues at the Liaison Committee for Medical Education and the Accreditation Council for Graduate Medical Education, clearly dictate a large part of the curriculum of both undergraduate and graduate medical education. Why should the far longer period of maintenance of clinical competence during our entire careers not be based on evidence of our practice?) Consequently, providers of CME will be expected to demonstrate that the CME offered incorporates into their activities the professional practice gaps of their own learners. This could be answered practically by analyzing quality improvement (QI) data to improve the care of inpatient admissions, peri-operative statistics, and quality discharges, and more generally by QI representation on the CME committees. Encouragement is given to assess the improvement in patient outcomes as a result of CME intervention. Commendation is given for strategies to overcome system barriers for physician improvement. The goal of CME should be improving our professional practice, even as the goal of our early medical education was to maximize our professionalism in practice.

Another major emphasis of the ACCME is equivalency. In short, this means that the physician learner should be able to expect the same quality of educational experience in a CME offering by Harvard Medical School or the American College of Physicians as an accredited local specialty chapter or hospital provider. An educational event should result in the same outcome everywhere, every time, as measured at the local up to the national level. From the perspective of the ACCME, this evolution should begin from the top down. It is applying a uniform standard and uniform site surveyor training to ensure the equivalency in accrediting CME providers. The goal is to create equivalency in the accreditation rules, process, interpretation, outcomes, and evolution.

Having spent five to twelve years building the foundation of our medical education, I believe we all desire the best quality for the next forty years of our continuing medical education so that we may deliver the best, most competent care to our patients, and the Accreditation Council for Continuing Medical Education is striving to achieve this.

THE PRESIDENT'S INAUGURAL ADDRESS

"OUR PATIENTS ALWAYS COME FIRST" (ABRIDGED)

BY CYNTHIA JEAN GOTO MD

Cynthia Jean Goto MD
HMA President

It is indeed an honor to be elected to represent the Hawai'i Medical Association as we continue to chart a course through the 21st century. I pledge to do my best in fulfilling the mission of the HMA, and I would like to express my profound gratitude and appreciation for the dedication of all of the past Presidents and officers of the HMA who have laid the foundation for the organization as we continue to move forward.

As you may know, the Hawai'i Medical Association is celebrating 151 years of dedication to the health of the people of Hawaii. How did we come to be?

Before we look forward to where HMA is going, let's take a moment to go back in time and reflect on where we have been in the past. On May 19, 1856, the Privy Council of 22-year old Alexander Liholiho, King Kamehameha IV of the Kingdom of Hawai'i, met to hear His Majesty announce his impending marriage to Emma, daughter of T.C.B. Rooke Esquire, MD. During this meeting, another item of business was to hear a petition for a charter of incorporation submitted by ten Honolulu physicians. On July 19, 1856, the charter forming the "Hawaiian Medical Society" was granted. The society was formed for the encouragement and cultivation of medical science. It was devoted to the collection and diffusion of medical knowledge, the advancement of the interests and usefulness of the medical profession, and the cultivation of harmony and good feeling among its members. It is under this charter, duly amended, that the Hawai'i Medical Association operates today.

At this period in Hawaiian history, its King was deeply concerned with the health of his people. Leprosy had already been noted; a smallpox epidemic resulted in 6,000 deaths; there were epidemics of measles, pertussis and influenza; syphilis and gonorrhea were endemic and there was high infant mortality. The Hawaiian population dropped from approximately 124,000 to 66,000 between 1832 and 1860. Throughout the rest of the 19th century, the health of those living in Hawai'i was threatened by epidemics of infections such as cholera and bubonic plague.

The history of medicine in Hawai'i is fascinating and I do not have time to take you through its pages. Suffice it to say that the origins of the county medical societies, maintenance of the highest ethical and professional standards of physicians, the medical library, the *Hawai'i Medical Journal*, the medical examiner system, improvement in public health efforts such as sanitation and vaccination, the Hawai'i Cancer society, the emergency ambulance system, a disaster preparedness committee, and the civilian blood bank can all be connected to the efforts of the physicians of this organization.

I would like to thank Dr. Harry Arnold, Jr., Dr. Ann Catts, Dr. Calvin Kam, and Dr. Alfred Morris for providing the information which made this brief journey into history possible.

Let's fast forward 151 years. What are we facing today? Are these the times that try men's souls? Physicians face different, but no less important, challenges in the 21st century. We are still charged with maintaining the high ethical standards of the profession. We strive to keep the professional standards of physicians who practice medicine and non physicians who care for patients at a level that is always in the best interests of our patients. Public health is still a priority. Although the types of threats to public health have changed, we must still address them. Today, they include access to health care (including lack of health insurance and critical shortages of physicians); obesity with its subsequent health consequences such as diabetes; substance abuse including methamphetamine, alcohol, and tobacco; mental illness; poverty; etc. The list goes on and on.

There is still much we need to accomplish and it is time to renew our commitment to these efforts. There is no doubt that the American health care system is broken. The fix will not be easy. As society moves forward to improve our health care, there is one thing we must continue to emphasize–physicians are an integral and inseparable part of the system and must be part of the solution. Our HMA, as in the past, is dedicated to serving physicians, their patients, and the community through representation, advocacy, and public service. This is our purpose and our mission.

In July, I was privileged to represent the HMA at the annual University of Hawai'i White Coat ceremony, which bestows to the first year medical students their first white coats, their "cloaks of compassion." The ceremony included recitation of the Hippocratic oath and these passages: "…to treat without exception all who seek my ministrations… remember that caring for the patient will be my primary concern… recognize that such caring requires my being available, giving my time generously… uphold the highest ethical, moral, and behavioral standards for myself and my peers… my behavior will always be honorable, thoughtful, and reflect justice toward all humanity."

This is an oath that physicians hold dear every day of their lives. Our patients always come first. Caring for our patients occurs at all hours of the day and night; requires keeping abreast of advances in medicine; often involves assisting our patients as they try to navigate the complex medical system of care; and demands that we advocate for policies that will enable us to stay in practice to take care of our patients. If we cannot stay in practice, we cannot practice medicine. We need medical liability reform. We need adequate reimbursement

to cover our overhead expenses as any business requires. We need relief from the enormous burden of regulations and bureaucracy under which we must now operate.

Physicians are passionate about these issues because they affect our ability to care for our patients. If we cannot overcome these barriers, the practice of medicine is in jeopardy. We must do all we can to encourage students to enter the profession and create an environment where physicians can do what they do best. These issues must be addressed to maintain the best quality of health care for all of the people of Hawai'i.

Let us do what we entered the profession to do and what we do best, caring for our patients with compassion. As Dr. Damon Sakai said at last year's White Coat ceremony: "For when all is said and done, what they'll remember about us is our compassion."

I look forward to working with all of you as we continue to strive for the best health care for all of Hawai'i's people.

Aloha and Mahalo.

Patricia Lanoie Blanchette, MD - 2007 Immediate Past President; Cynthia Jean Goto, MD - 2007 President-Elect; Linda Rasmussen, MD - 2007 President.

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Music and Cancer Pain Management

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and Rosanne Harrigan EdD, APRN-Rx, FAAN

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Abstract

Problem. *When coupled with the often debilitating side-effects of pharmacological interventions, chronic cancer pain may elicit feelings of anxiety and depression and therefore adversely affect patient well-being and quality of life.*

Purpose. *This review article is a systematic assessment of the published literature related to music and cancer pain management.*

Method. *A comprehensive systematic evaluation of the data based literature was undertaken and analyzed using matrix analysis.*

Results. *As an adjunctive form of pain management, music therapy has been shown to address some of these hardships by providing patients with an alternative effective means by which to reduce their subjective experiences of pain. Studies investigating the efficacy of music therapy during invasive cancer procedures and chemotherapy demonstrated the role that attention states play in distracting patients from, and therefore minimizing their experience of, the pain associated with such treatments. Other studies examining diverse outpatient populations revealed similar findings, illustrating well the cognitive-affective dimensions of pain perception. Although these findings fail to adequately address the ambiguity surrounding music therapy's role in cancer pain management, music therapy has nonetheless been shown to significantly reduce anxiety and, in so doing, indirectly lessen the intensity of pain while improving patient quality of life.*

Introduction: The Problem

Defined as an unpleasant sensory or emotional experience associated with tissue damage, pain plays an indispensable role in providing organisms with a regulatory bio-feedback mechanism with which to safeguard their survival and maintain their integrity in an ever-changing environment.[1,2] This beneficial adaptation is well demonstrated in the field of oncology, wherein an increase in the severity of pain often signifies a deteriorating condition, and a decrease in pain a correspondingly improving condition.[3] Over a sustained period of time, however, chronic cancer pain may actually lead to anxiety and depression, thereby contributing significantly to unnecessary suffering and a decrease in patient quality of life.[2,4] Indeed, the presence and intensity of pain have been shown to correlate directly with the incidence and severity of depression, along with a higher prevalence of a patient's desire for death.[5] Although opioids and other analgesics have been the mainstay in combating these problems, many patients do not respond well to conventional pharmacological therapies either because of the undesirable side-effects of these medications or simple non-compliance.[6] In view of these drawbacks, more and more individuals are turning to alternative, non-pharmacologic approaches in managing their pain.

Purpose

This article will:

1. Discuss variables contributing to the development of persistent, non-nociceptive pain;
2. Suggest additional psychological factors that mediate pain perception;
3. Propose musical therapy as an innovative non-pharmacologic treatment for cancer pain management;
4. Describe experimental studies involving music for pain control with cancer patients; and
5. Provide details of a specific musical intervention drawn from Chinese spirituality in meditating late-stage complex regional pain.

While novel, music therapy is one such field that shows great promise as an adjunctive therapeutic component in cancer pain management. Music therapy, unlike its analgesic counterparts, poses little to no risk to the patient.

Methods

This review includes 16 data-based publications listed on Medline through October 2004 relating to music and cancer. Search terms included music, music therapy and cancer. The search was supplemented by manual searching of reference lists from each relevant paper identified. Only articles that could be reviewed in their entirety were included.

Methodological and Conceptual Issues

One of the challenges of reviewing and comparing this historical database of articles are the changes in definitions of music and music therapy over the years.

Analyses

Data were entered into a matrix and analyzed using constant comparative analyses. Themes generated included physiology of pain, music therapy as non-pharmacological treatment of pain, experimental studies involving

music for pain control with cancer patients, and a description of a specific Chinese spiritual musical intervention. The findings related to each of these categories are described below.

Physiology of Pain: The Development of Persistent, Non-nociception

Given the multi-dimensional nature of pain, which is itself a function of mind and body, a broad understanding of both its physiological and cognitive-affective dimensions must be considered before any discussion of alternative treatments can take place. From a biological standpoint, then, the sensation of pain begins with pain pathways comprised of sensory fibers that convey nociceptive and non-nociceptive information from the skin and most internal tissues to the spinal chord.[2] Within the human body, there are a variety of sensory fibers that evoke unique responses to different kinds of stimulation. Of these fibers myelinated A fibers and small diameter unmyelinated C fibers have been shown to convey the bulk of nociceptive information. C fibers in particular have been shown to respond to all forms of noxious stimulation, whether thermal, mechanical, or chemical in origin. When stimulated, these fibers synthesize peptides and express growth factors mat together trigger signal-transduction pathways from the spinal chord to the limbic or sensory areas of the forebrain. Derived from innervated tissue, these growth factors maintain the biochemical and physiological status of sensory neurons. Whenever any tissue in the body is damaged or inflamed, these neurons will undergo a series of phenotypic changes derived from new patterns of gene expression in the spinal chord and brain. That is, peptide or growth factor receptor expression can shift, and new molecular signatures can be expressed, each of which reflect different chronic pain conditions. Since each pain state generates a unique set of neurochemical changes in sensory neurons and the spinal chord, different types of analgesics are required to block the highly variable peripheral actions of these growth factors in order to prevent much of the hyperalgesia that accompanies tissue damage.

Despite these decidedly objective physiological pathways, pain is first and foremost a subjective state that cannot be validated or invalidated with certainty by an external observer.[1] From a cognitive-affective point of view, several variables may contribute to the development of persistent, non-nociceptive pain. These variables include one's subjective perception of pain severity– where the intensity of acute onset pain serves as a good predictor of the intensity of subsequent chronic pain— and the patient's emotional state at the time of acute pain, where anxiety, depression, and lassitude have been shown to contribute to persistent pain states. In addition, a patient's own cognitive processes have been shown to regulate the experience of chronic pain such that maladaptive coping, passive cognition, perceived stress or stressful life events, or disability may lead to the development of persistent pain.

Additional Psychological Factors that Mediate Pain Perception

Apart from these cognitive processes, a number of additional psychological factors may also mediate pain perception. Among them, a patient's attention state is perhaps the most studied psychological variable mediating pain perception.[7] A number of studies investigating the role of attention state have demonstrated that pain is perceived as less painful when individuals are distracted from it.[8] Other psychological factors, such as mood and emotional state, may also regulate pain by altering the neurochemistry of the limbic system and other cortical areas of the brain involved in pain perception.[7]

Although virtually no study to date has directly addressed the relationship between neural mechanisms and the emotional modulation of pain perception, researchers have proposed several theories of emotion that seek to reconcile this disparity. Motivational Priming Theory, for instance, postulates the existence of an appetitive primary motive system associated with positive affect and an aversive primary motive system associated with negative affects; both systems operate as opponent processes, where positive affect is associated with increased dopamine levels in the frontal cortical areas of the brain, and vice versa. The release or inhibition of dopamine in turn influences cognitive functioning in the dopaminergic systems of the forebrain involved in pain and analgesia.

Even amid the promise that such theories hold for the development of multidisciplinary pain intervention strategies, the medical establishment continues to rely almost exclusively on prescription and non-prescription medication as aspirin and ibuprofen are frequently used—and may not control significant pain.[6] At present, relying solely on opioids and other analgesics has failed to effectively improve the quality of life for many cancer patients. Statistically speaking, of the 75% of advanced cancer patients in the United States who experience pain, 25% of them continue to die in severe pain despite the availability of alternative pain management treatments. Weitzer, Cokram, and Strickland; and, Ersek, Krabill, and Du Pen sought to investigate these staggering statistics by conducting a qualitative study of patients diagnosed with terminally invasive or metastatic cancer.[5,9] Among those factors hindering patients' use of pain management strategies were fears of the side effects posed by analgesics, along with concerns about subsequent addiction and tolerance to these medications. In addition, many patients expressed concerns about the cost of medication, as well as a potential decline in function without the aid of prescription drugs. Overall, the study demonstrated that patient attitudes and beliefs greatly influence analgesic use, thereby underscoring the importance of exploring non-pharmacologic approaches in the management of cancer pain.

Musical Therapy as an Innovative non-Pharmacologic Cancer Pain

In view of the recommendations presented by Ersek, Krabill and DuPen, the burgeoning field of Complementary and Alternative Medicine (CAM) signifies a new era in the development of innovative non-pharmacologic treatments which together hold great promise for cancer pain management.[9] With anywhere between 7% and 64% of worldwide cancer patients using CAM treatments during some stage of the disease, many researchers in the field have suggested that these patients are themselves primarily responsible for the rise in CAM use for pain and symptom management.[10] At present, roughly 70% of patients in cancer research and treatment centers in the United States depend on CAM therapies, compelling oncology professionals to develop a basic knowledge of these therapies and to incorporate where appropriate evidence-based CAMs into their clinical practices. Broadly speaking, CAM domains encompass mind-

body, manipulative body-based, energy, and a host of other alternative medical systems drawn from a variety of esoteric traditions. Music therapy specifically fells beneath the mind-body domain, which seeks to reduce stress and develop an inner calmness, stability, and non-reactivity of the mind by quieting the mind and body. Reports indicate that many cancer patients in ambulatory settings found mind-body techniques helpful in enabling them to become more compassionate caregivers of their own experience, without triggering memories of previous traumatic events or speculations of future events. These patients experienced decreased stress and suffering along with fewer mood disturbances.

Experimental Studies Involving Music for Pain Control with Cancer Patients

In examining more closely these anecdotal reports, a study conducted by Susan Beck sought to explore the effects of music on cancer patients' pain perception.[11] By using a visual analogue pain scale to measure the effects of at least 90 minutes of music exposure each day, patients listened to selections that they found most pleasing. Of the 15 outpatients in the study, 12 reported at least some beneficial response to music therapy, while 7 of those experienced a moderate to great response. Beck postulated that the non-threatening qualities of music put patients at ease and enabled them to better express their fears and frustrations. By facilitating communication, music therapy therefore helped to motivate patients to relax, providing them with greater pain relief in the process. According to Beck, the next step in the evolution of music therapy involves building a music library from which patients can choose their own favorite musical selections, as well as investigating some of the underlying neural mechanisms involved in music's apparently beneficial effects. Weber, Neussler, and Wilmanns sought to further explore these decidedly beneficial findings by examining the influence of music therapy on cancer patients during chemotherapy as a means of reducing some of the emotional trauma, anxiety, and tension associated with cancer treatment.[12] The one-year pilot project involved 35 cancer patients who were given the option of listening to music during chemotherapy treatment from a variety of different musical genres and styles.

The findings indicated that music did indeed improve the quality of life for these patients, as measured by more relaxed facial expressions and decreased muscle tension. Surprisingly, the longer therapy continued, patients became more grateful for the music they listened to. Furthermore, a majority of the participants preferred classical music to other genres, including new age. This prompted Weber, Neussler, and Wilmanns to conclude that classical music must by virtue of its melodic design have a way of calming patients more significantly than other types of music.[12] Together, the findings of Kerkvliet and Weber, Neussler, and Wilmanns support the aforementioned notion that attention states may distract cancer patients from their pain.[7,11,12] Accordingly, Kwekkeboom sought to take these findings one step further by examining whether music may also play a role in altering the perception and transmission of pain impulses by activating the limbic system and other sensory regions of the brain.[13] In assessing the validity of this hypothesis, the study used a controlled experimental design in which 58 cancer patients were randomly assigned to 1 of 3 conditions during a noxious medical procedure: an experimental music intervention group, an experimental distraction intervention group, or a control group. Research nurses helped participants to complete pain rating scales and other measures of anxiety before and after the procedure. As a whole, no significant differences were found in pain, anxiety, and perceived control outcomes between the music intervention and distraction groups, suggesting that music may simply serve as a mode of distraction. It is important to note, however, that several confounding variables may have negatively affected the outcome of the study, including the relatively early phase of treatment for some patients– who would want to be fully present and not distracted from what was going on– along with added distraction from the voices of the surgeon and other personnel which would have made it difficult to concentrate on the music during the procedure. Despite these mitigating variables, the study nonetheless confirmed that, in the very least, music may serve as a useful distraction in effectively decreasing cancer patients' subjective experience of pain.

Description of a Specific Chinese Spirituality Musical Intervention

Whereas a majority of the representative research into music therapy and cancer pain management required that patients select their own genre of music, Wu et al, sought to assess the clinical efficacy of a specific musical genre drawn from Chinese spirituality in mediating late-stage complex regional pain syndrome (CRPS-I).[14] Defined literally as "vital energy training," *Qi gong* is based upon the traditional Chinese system of medicine that regards illness as the end result of a fundamental imbalance *of Qi,* the universal vital energy. *Qi* itself consists of *YIN and YANG,* or negatively and positively charged forms of energy. Although mutually interdependent, these two types of energy are in opposition to one another such that when one increases, the other decreases. All forms of treatment within the Chinese system therefore attempt to reestablish equilibrium between these opposing forces.

Surprisingly, a number of anecdotal reports suggest that *Qi gong* training has the potential to reverse structural abnormalities and improve function among patients with long-term disabilities. In examining the validity of these reports, Wu et al, assigned 26 adult patients with CRPS-I to 1 of 2 independent groups: an experimental *Qi gong* training group and a control group.[14] Although both groups were instructed to listen to recordings of various *Qi gong* musical compositions while viewing associated visual images, only the experimental group received subsequent *Qi gong* training by certified Asian masters. Results indicated that 82% of *Qi Gong* patients reported less pain by the end of the first training session compared to only 45% of the control patients. By the end of the last training session, roughly 91% of patients reported a transient (within-session) reduction in pain compared to only 36% of the control group. Moreover, while only 70% of the control group reported a between-session reduction in anxiety, 100% of the *Qi gong* patients reported a decline in the anxiety they experienced as a direct result of the training they received. Although the study ultimately failed to demonstrate any dramatic changes in structural abnormalities or unproved function, *Qi gong* training was nevertheless helpful in managing some of the subjective dimensions of CRPS-I, including pain and emotional distress. It is also interesting to note that vital signs stabilized with respiratory rate, heart rate, and blood pressure normalizing in more than half the participants.

In considering the broad differences in experimental design and methodology employed by the aforementioned studies, Evans sought to investigate music therapy's overall effectiveness in patient care by conducting a systematic review of 29 such studies.[15] As a whole, the meta-analysis indicated that music has no effect when patients are asked to think about and rate the severity of their pain. However, there was some evidence to suggest that music may serve as an effective diversion in reducing patient anxiety. Music was shown to improve the mood of hospital patients, reduce the need for sedation and analgesia during procedures, and improve patient tolerance during these procedures. As a caveat to these findings, however, many of the studies in the review failed to arrive at any definitive conclusions due to their small sample sizes and inadequate funding, the latter of which may have stifled a more in-depth examination of music therapy's potentially beneficial prospects. Nevertheless, even despite these shortcomings, Evans (2002) successfully validated the effectiveness of music therapy in a manner consistent with the findings of Kerkvliet; Weber, Neussler, and Weilmanns; Kwekkeboom and Wu.[11,12,13,14]

Directions for Future Research and Conclusion

Given the paucity of research surrounding the relationship between the physiological and Cognitive-affective dimensions of pain, future research should seek to address the underlying physiological mechanisms involved in music therapy's role in pain management. Quantitative, as opposed to qualitative, assessments would more definitely examine this relationship from an objective standpoint despite the inherently subjective nature of pain. In addition, studies with greater sample sizes and more controlled experimental designs would more conclusively assess the efficacy of music therapy as an adjunctive pain management strategy. Studies employing magnetic resonance imaging (MRI) techniques, for instance, may better elucidate some of the underlying neural mechanisms involved in music therapy. That is, having cancer patients listen to a standardized repertoire of music while undergoing an MRI scan may potentially clarify some of the ambiguity surrounding music therapy by providing clinicians with solid empirical evidence to support their findings. Where possible, future research should also seek to conduct long-term studies examining the impact of music therapy over an extended period of time.

By employing these proposed modifications, researchers may ultimately arrive at a better understanding of pain from both a subjective and objective standpoint and, in so doing, develop more comprehensive intervention strategies in the treatment and management of cancer pain. As a step in the right direction, clinicians have already begun to develop more comprehensive models for cancer pain management that seek to integrate the psycho-social-spiritual dimensions of health and wellbeing. Otis-Green, Sherman, Perez, and Baird, for instance, recognized the multi-dimensional nature of cancer pain and have accordingly developed a multidisciplinary model that seeks to provide the most effective pain management techniques to a variety of patients within cancer research centers.[16] According to this model, effective and comprehensive pain management should be carried out by a team of health care practitioners comprised of psychologists, social workers, spiritual care providers, and psychiatrists. By integrating these disciplines, clinicians can be sure to promote more fulfilling, supportive, and professional relationships in managing the pain and suffering of their patients. Within such an inclusive context, music therapy and its correspondingly beneficial effects will most surely represent but one aspect of a more holistic approach towards minimizing the pain and suffering associated with cancer.

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A Snapshot of Bronchiolitis in Hawaiian Children: Winter 2005

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Introduction

Bronchiolitis is the leading cause of hospitalizations for infants < 1 year of age.[1-4] It is characterized by increased edema and mucus production in the small airways caused by an inflammatory response to a viral infection. Common causes include respiratory syncytial virus (RSV), human metapneumovirus, influenza, adenovirus, and parainfluenza. There is wide variability of diagnosis and treatment across the United States. In an effort to collect further data in regards to bronchiolitis, the Pediatric Research in the Inpatient Setting (PRIS) network conducted a multicenter study looking at discharge criteria from the emergency department over the course of 2 bronchiolitis seasons. The Pediatric Hospitalist Division at Kapiolani Medical Center for Women and Children (KMCWC) participated in this study. Using the data gathered for this study, the authors report a snapshot of patients with bronchiolitis who came through the emergency department (ED) at KMCWC in late 2005.

Methods

Ninety-seven medical charts of bronchiolitic patients seen in the KMCWC Emergency Department during an 8 week period in late 2005 were reviewed with the approval of the Institutional Review Board. The data collected included: ED disposition, sex, home zip code, and ED length of stay. For the patients who were admitted, in addition to the factors already listed, the following data were obtained: length of hospitalization, past medical history, concurrent diagnoses, vital signs, tobacco exposure, and medications (including discharge medications).

Results

The data show that boys were seen more often than girls (61.9% versus 38.1%). There was a large distribution of patients from across Oahu: including Honolulu (>40%), Waipahu (16.5%), Ewa Beach (7.2%), Pearl City (6.2%), Wahiawa (6.2%), and Waianae (2%) (Graph). The mean length of stay in the Emergency Department was 2.8 hrs (+/-2 SD).

Most patients were discharged to home from the Emergency Department. Thirteen out of 97 patients were admitted (13%) to the pediatric inpatient wards. Of these admissions one patient was admitted twice. The sex of the patients admitted was equal amongst boys and girls. The admissions were also widely distributed from across Oahu with Honolulu (30%) and Ewa Beach (23%) most frequently represented.

The average length of hospitalization was approximately 2.5 days and the average age of the admitted patients was 6.2 months. Of the 12 patients admitted only 1 was prematurely born (31 weeks). There were no children admitted with congenital heart disease. Two out of the 12 patients had complex social situations which factored into the decision to admit. Dehydration was a common secondary diagnosis and found in a third of the patients admitted. A quarter of the patients were hypoxic on admission. Close to 30% of the patients admitted were exposed to tobacco in their primary environment. Ten patients (83%) received and were discharged home on albuterol. Antibacterial agents were used in 4 of the admitted patients, 2 of these patients were also diagnosed with otitis media (Table).

Discussion

This data is interesting in light of the recent 2006 American Academy of Pediatric (AAP) Clinical Practice Guideline on the Diagnosis and Management of Bronchiolitis.[5] This guideline examined evidence for various treatment options for bronchiolitis in both the outpatient and hospitalized setting. In this guideline, the evidence examined produced the following recommendations: routine use of bronchodilators in the management of bronchiolitis is not supported; a carefully monitored trial of alpha (epinephrine) or beta (albuterol) adrenergic bronchodilators is an option as it may benefit some patients. When the AAP bronchiolitis subcommittee reviewed many of these studies it appears that nebulized racemic epinephrine may be more beneficial in the ED or hospitalized patient. However, in the outpatient setting a bronchodilator may be the more appropriate medicine to trial due to the short action, possible adverse effects and lack of outpatient studies for epinephrine. Of interest this studies data shows that none of the admitted patients received a trial of nebulized epinephrine where as nearly all the patients received albuterol. In the authors' experience epinephrine has not been used commonly at KMCWC, however this recommendation may change that practice to include a trial of epinephrine on bronchiolitis patients.

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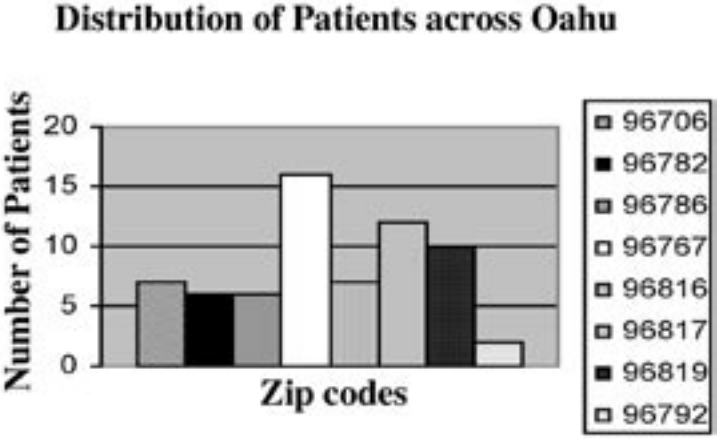
Details about hospitalized patients.							
Subject	**Length of Stay (days)**	**Chronic Disease**	**Complex social situation**	**Age**	**Discharge medications**	**Other Diagnosis**	**Tobacco exposure**
1	4	None	Non-complaince	1.5 mo	Albuterol	None	No
2	2	None	No	8 mo	Albuterol, Amoxicillin	Hypoxia, Otitis media	No
3	1	None	CPS custody	6 mo	Albuterol, Amoxicillin	None	Yes
4	3	None	No	3 mo	Albuterol	Dehydration, influenza	No
5	2	Eczema	Teen mom	2 mo	Hydrocortisone cream	Eczema	No
6	3	None	No	2 mo	Albuterol	Dehydration	Yes
7	1	None	No	9 mo	Albuterol	Hypoxia	No
8	1	Prematurity	No	9 mo	Albuterol, Azithromycin	Hypoxia	No
9	3	Prior Wheezing	No	6 mo	Albuterol	Diarrhea	Yes
10	1	Prior Wheezing	No	10 mo	Albuterol	None	No
11	3	None	No	11 mo	Albuterol	Dehydration	No
12	3	None	No	7 mo	Amoxicillin	Otitis media, dehydration	No



Distribution of most common zip codes of patients seen in the ED during the study period.

This data showed no concurrent serious bacterial illness (SBI) in the hospitalized patients. This concurs with several prospective and retrospective studies examining the rates if SBI in patients with bronchiolitis.[6-15] The AAP practice Parameter recommends that antibacterials only be used in patients with coexistent SBI. A 2002 article by Purcell states that urinary tract infection is the most common cause of SBI in patients with bronchiolitis.[11]

Two of the studys' hospitalized patients received an antibacterial secondary to a concurrent diagnosis of otitis media. The evidence examined by the AAP Bronchiolitis subcommittee shows a high prevalence of acute otitis media in patients diagnosed with bronchiolitis. The most common organisms found by tympanocentesis were *H. flu, S pneumoniae*, and *M catarrhalis*.[16,17]

Almost a third of the hospitalized patients were exposed to passive smoking in their primary environment. Previous evidence has shown that passive smoking increases the risk of viral upper respiratory infections including RSV which is associated with bronchiolitis.[18,19] This may provide a good opportunity for smoking cessation education for family members of patients hospitalized with bronchiolitis.

The data provide a brief snapshot of infants who were diagnosed with bronchiolitis during the winter of 2005 in the KMCWC Emergency Department. Further information from these patients will be used to look at discharge criteria from the emergency room by the PRIS network. Although bronchiolitis is a common diagnosis in children less than 2 years of age, the new information provided from this large multicenter study and future studies should help with further practice parameters for bronchiolitis.

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Comparison of Cleft Lip Only and Cleft Lip and Palate, Hawai'i, 1986-2003

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Abstract

Using birth defects registry data, this investigation compared cleft lip only (CLO) and cleft lip and palate (CLP). CLP cases were more likely than CLO cases to expire after birth (3.2% versus 1.0%), be boys (68.0% versus 56.5%), Pacific Islander (26.5% versus 16.4%), have lower birth weight (20.4% versus 11.1%), and lower gestational age (22.6% versus 20.4%).

Introduction

Cleft palate only is believed to differ from cleft lip with or without cleft palate with respect to their embryology and epidemiology.[1] As a result, much of the epidemiologic research investigating oral clefts has divided the oral clefts into cleft palate only and cleft lip with or without cleft palate.

However, there are indications that cleft lip only (CLO) differs from cleft lip and palate (CLP). CLO results from a malformation of only the primary palate while CLP results from a malformation of both the primary and secondary palates.[2] CLP is more common than CLO [3-7] and more frequently has other structural birth defects.[3,4,6,8] Although both CLO and CLP are more frequently found among boys, the gender discordance is greater with CLP.[4,5,7,9,10] CLP is more likely than CLO to be found among whites and Hispanics.[6] One recent study that compared the two types of cleft lip found CLP more likely to be associated with mortality, lower birth weight, and gestational age. CLO was more likely to be associated with multiple births and consanguinity.[4]

In spite of the suggestion that CLO and CLP differ from one another, there is limited research comparing the two types of cleft lip. The objective of this investigation was to compare CLO and CLP using data from a birth defects registry in Hawai'i. Although the purpose of this study was not to specifically test a hypothesis, the hypothesis is that the distribution of CLO and CLP cases in the study will differ with respect to different variables. The authors had previously compared cleft palate alone with cleft lip with or without cleft palate.[11,12]

Materials and Methods

This study used data from the Hawai'i Birth Defects Program (HBDP), a population-based birth defects registry that covers the entire state.[13] Inclusion criteria for the HBDP consists of all infants and fetuses of all pregnancy outcomes of any gestational age that were delivered in Hawai'i and diagnosed with a reportable birth defect diagnosed between conception and a year after delivery. Trained HBDP staff identify potential subjects and ascertain information through review of logs and medical records at all delivery and tertiary care pediatric hospitals, facilities that perform elective terminations due to prenatal diagnosis of birth defects, cytogenetic laboratories, genetic counseling centers, and all but one of the major prenatal ultrasound facilities in Hawai'i.

Cases were all infants and fetuses with CLO or CLP identified by the HBDP among deliveries during 1986-2003. Diagnoses of cleft gum, alveolus, and uvula were excluded from the analysis because these diagnoses are not believed to be completely diagnosed. The cases were classified according to whether they had been diagnosed with a chromosomal abnormality, other syndrome, other major structural birth defects, or with only the oral cleft (isolated). Major structural birth defects were defined as those structural birth defects that the Centers for Disease Control and Prevention (CDC) recommend be ascertained even if they occur alone. In contrast, minor structural birth defects are those structural birth defects that the CDC recommend only be ascertained if they occur in the presence of major structural birth defects. Examples of minor structural birth defects are extra nipples, webbing of the neck, and flat nasal bridge. The distribution of CLO and CLP cases by these categories was determined. Those cases with diagnosed chromosomal abnormalities or other syndromes were excluded from subsequent analyses because the variables examined might be related to the chromosomal abnormality or syndrome and not the oral cleft. It is recognized that some of the cases included in the subsequent analyses may have undiagnosed chromosomal abnormalities or syndromes.

The CLO and CLP distribution were calculated for prenatal diagnosis of an oral cleft, delivery period, maternal age, maternal race/ethnicity, residence at delivery, infant/fetus sex, plurality, and, for live births, birth weight and gestational age.

The 18-year delivery period was divided into 3 equal 6-year periods. In 1996, the United States Food and Drug Administration required that all enriched cereal

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Table 1.— Distribution of cleft lip only and cleft lip and palate cases by presence of other birth defects, Hawai'i, 1986-2003.

	Cleft lip only		Cleft lip and palate	
	No.	%	No.	%
Chromosomal abnormality	12	9.8	25	9.3
Other syndrome	1	0.8	14	5.2
Additional major structural birth defects	30	24.4	75	27.9
Isolated (no addition birth defects)	80	65.0	155	57.6
Total	123		269	

Table 2.— Distribution of cleft lip only and cleft lip and palate cases by pregnancy outcome, Hawai'i, 1986-2003.

	Cleft lip only		Cleft lip and palate	
	No.	%	No.	%
Live birth	99	90.0	219	95.2
Died <1 year*	1	1.0	7	3.2
Fetal death	5	4.5	6	2.6
Elective termination	6	5.5	5	2.2
Total	110		230	

Excludes cases with chromosomal abnormalities or other syndromes. None of the differences in percent were statistically significant. *Percent is of live births.

Table 3.— Rate per 10,000 live births of cleft lip only and cleft lip and palate by selected time periods, Hawaii, 1986-2003.

Time period	Total live births	Cleft lip only		Cleft lip and palate	
		No.	Rate	No.	Rate
6-year equal time periods					
1986-1991	116,040	44	3.79	77	6.64
1992-1997	113,544	40	3.52	83	7.31
1998-2003	105,080	26	2.47	70	6.66
Folic acid fortification time period*					
1986-1996 (before)	212,258	78	3.67	142	6.69
1997-1998 (transition)	34,887	12	3.44	33	9.46
1999-2003 (mandatory)	87,519	20	2.29	55	6.28

Excludes cases with chromosomal abnormalities or other syndromes. None of the changes in rate were statistically significant. *Fortification of flour and other enriched grain products in the United States mandatory by January 1, 1998.

grains such as flour, corn meal, paste, and rice must be fortified with folic acid by January 1, 1998.[14] Although this policy was implemented primarily to reduce the number of infants and fetuses with neural tube defects, research has suggested that maternal periconceptional use of folic acid may reduce the risk of oral clefts.[15-19] Thus, it might be expected that oral cleft cases would decrease after folic acid fortification went into effect. So the CLO and CLP cases were also separated into a second set of 3 delivery periods: 1986-1996 (prior to fortification), 1997-1998 (transition to fortification), 1999-2003 (mandatory fortification).

Maternal race/ethnicity was restricted to 5 racial/ethnic groups in the state: Caucasian, Far East Asian (Japanese, Chinese, Korean), Pacific Islander (native Hawaiian, Samoan), Filipino, and other/unknown. Residence at delivery was classified as metropolitan Honolulu (zip code starting with 968) and the rest of Hawai'i (zip codes starting with 967). All of the variables were not available for all of the cases, so the sum of the subgroups will not always equal the total number of cases.

The presence of other structural birth defects might influence the variables examined. However, due to the relatively small number of cases, particularly when divided into subgroups, the comparisons were made only for all cases combined and not separated into isolated cases and cases with other major structural birth defects. The final manuscript was reviewed by the Hawai'i Department of Health (DOH) institutional review board.

Results

A total of 392 cases of cleft lip with or without cleft palate were identified by the HBDP among deliveries during 1986-2003. Of these cases, 123 (31.4%) were CLO and 269 (68.6%) were CLP. During the same time period, there were 334,664 total live births in Hawai'i. Thus the rate per 10,000 live births was 3.68 for CLO and 8.04 for CLP.

Table 1 presents the distribution of CLO and CLP cases by presence of other birth defects. The majority of both CLO and CLP cases involved isolated defects. A higher proportion of CLP than CLO cases involved other syndromes and additional major structural birth defects not associated with diagnosed chromosomal abnormalities or other syndromes. If cases with diagnosed chromosomal abnormalities or other syndromes are excluded, then additional structural birth defects were diagnosed in 32.6% of CLP and 27.3% of CLO cases.

Table 2 lists the distribution of CLO and CLP cases without chromosomal abnormalities or other syndromes by pregnancy outcome. Although CLP cases were more likely to die after birth, CLO cases were more likely to result in fetal death or elective termination. A prenatal diagnosis of an oral cleft was made in 19 (15.4%) cases of CLO and 50 (18.6%) cases of CLP.

When CLO and CLP rates by time period were examined (Table 3), the CLO rate declined over the 18-year period while the CLP demonstrated no clear annual trend. The CLO rate was lower after folic acid fortification. In contrast, the CLP rate increased during the transitory folic acid fortification period then declined to a rate similar to that prior to fortification.

Table 4 provides the distribution and rates of CLO and CLP cases for various demographic and clinical factors. The distribution of both types of oral cleft were similar with respect to maternal age. A higher proportion of CLO cases were Far East Asians while a higher proportion of CLP cases were Pacific Islanders. A greater proportion of CLO cases had a delivery residence of metropolitan Honolulu. While the majority of both CLO and CLP cases were boys, the proportion was higher for CLP cases. The distribution of CLO and CLP cases by plurality were similar. CLP cases were more likely to have a lower birth weight and gestational age at delivery.

Discussion

This investigation compared CLO and CLP with respect to a variety of factors, thus contributing to the limited published information on the subject. Such information is important because much of the epidemiologic research has grouped CLO and CLP together, primarily because of the assumption that the two types of cleft lip differ mainly in severity. However, studies comparing CLO and CLP have found that they differ with respect to certain factors that suggest that the two types of cleft lip may have etiological differences as well.

The primary limitation of this study is the small number of cases, particularly when divided among the subgroups that were examined. Primarily because of this, for most of the analyses cases were not separated into those that were isolated and those involving other major structural birth defects. Further investigations involving larger numbers of cases are recommended to evaluate the findings of this study. Another potential limitation is incomplete ascertainment of CLO and CLP, which could introduce bias into the analyses. However, the HBDP utilizes a multiple-source ascertainment system in order to identify infants and fetuses with diagnosed birth defects as completely as possible. Cleft lip is generally an obvious defect that could be identified on physical examination; thus the defect is not likely to be undiagnosed, at least among live births.

This study found CLP to be more common than CLO, with CLP representing 69% of all cases with cleft lip. Prior research had likewise identified a preponderance of CLP.[3-7] If the difference between CLO and CLP was strictly due to severity of the defect, with CLO being the less severe defect, it is unclear why the more severe defect would be more common than the less severe defect. One possible explanation would be that potential etiologic factors tend to either cause CLP or no cleft lip at all, with a relatively narrow "range" at which the factor might cause CLO.

A higher proportion of CLP than CLO cases had additional major structural birth defects (33% versus 27%), a finding consistent with the literature.[3,4,6,8] This pattern might be expected if the difference between the two types of cleft lip was due to severity, with the factor causing the other structural birth defects also increasing the severity of the cleft lip.[20,21]

The mortality rate after live birth was slightly higher for CLP than CLO. Another study likewise found higher mortality among CLP cases.[4] However, the proportion of cases resulting in fetal death and elective termination was higher for CLO than CLP although the prenatal diagnosis rates were similar for the two categories. This seemingly contradictory finding may be due to the particular additional birth defects involved. It may be that the other birth defects identified in CLO cases were considered more serious than those identified in CLP cases. An alternate explanation is that at least some of the CLO cases resulting in fetal death and elective termination may have also had undiagnosed cleft palate. Studies have noted that prenatal ultrasounds are less likely to identify cleft palate than cleft lip.[22-24] However, it must be pointed out that this discussion is based on a small number of cases.

Table 4.— Distribution of cleft lip only and cleft lip and palate by various demographic and clinical factors, Hawaii, 1986-2003.

	Cleft lip only		Cleft lip and palate	
	No.	%	No.	%
Maternal age (years)				
<34	94	85.5	207	90.0
≥35	16	14.5	23	10.0
Total	110		230	
Maternal race/ethnicity				
Caucasian	20	18.2	38	16.5
Far East Asian	34	30.9	55	23.9
Pacific Islander	18	16.4	61	26.5
Filipino	27	24.5	50	21.7
Other/unknown	11	10.0	26	11.3
Total	110		230	
Delivery residence				
Metropolitan Honolulu	43	39.4	70	30.7
Rest of Hawaii	66	60.6	158	69.3
Total	109		228	
Sex				
Male	61	56.5	155	68.0
Female	47	43.5	73	32.0
Total	108		228	
Plurality				
Singleton	107	97.3	225	97.8
Multiple birth	3	2.7	5	2.2
Total	110		230	
Birth weight, live births (grams)				
<2500	11	11.1	44	20.4
≥2500	88	88.9	172	79.6
Total	99		216	
Gestational age, live births (weeks)				
<38	20	20.4	49	22.6
≥38	78	79.6	168	77.4
Total	98		217	

Excludes cases with chromosomal abnormalities or other syndromes. None of the differences in percent were statistically significant.

CLP rates in Hawai'i did not decline noticeably after folic acid fortification of cereals. This does not support the studies that found folic acid reduced the risk of oral clefts.[15-19] A potential explanation is that many women were already receiving sufficient folic acid through supplementation or their diets, in which case fortification would have had limited effect. However, CLO rates did decline after folic acid fortification, with the rate during 1999-2003 being 62% the rate during 1986-1996. However, this decline was not statistically significant. But if the observed decline in CLO rates is at least partially due to folic acid fortification, the lack of a similar effect for CLP would suggest etiologic differences between the two types of cleft lip. Moreover, the lack of any substantial decline in cleft lip rates after folic acid fortification observed in other studies[12,25-28] may be due to CLO and CLP being grouped together. Further investigations should separate the two types of cleft lip.

CLP cases were more likely than CLO to be boys, an observation consistent with the literature.[4,5,7,9,10] A higher proportion of CLO cases were Far East Asians while a higher proportion of CLP cases was more Pacific Islanders. Another investigation observed higher rates among CLP cases than CLO cases for whites and Hispanics.[6] A higher rate of CLO cases had a delivery residence in Metropolitan Honolulu. It is unclear how the observed differences between CLO and CLP with respect to sex, race/ethnicity, and delivery residence could be easily explained by severity of the defect. Such distinctions might more likely be accounted for by etiologic differences between CLO and CLP.

The distribution of CLO and CLP cases by maternal age were similar. A previous investigation had likewise found no difference between the two oral clefts with respect to maternal age.[29] Although a previous study had reported CLO to be more likely to occur with multiple births than CLP,[4] in the present investigation the distribution of cases by plurality was similar for CLO and CLP.

CLP cases were more likely than CLO to have a lower birth weight and gestational age at delivery. A recent study that compared CLO and CLP with respect to a variety of factors found a similar relationship between the two types of cleft lip and birth weight and gestational age.[4] The relationship between CLP and lower birth weight and gestational age could possibly be explained by the higher proportion of other birth defects among CLP cases. These additional birth defects might result in earlier delivery and lower birth weight.

In summary, this investigation found CLO and CLP to differ with respect to the presence of other birth defects, pregnancy outcome, delivery period, infant/fetus sex, maternal race/ethnicity, and birth weight. Differences in some of these factors, i.e., presence of other birth defects, pregnancy outcome, and birth weight, could be explained by the assumption that CLP is a more severe form of cleft lip than CLO. However, differences in other factors, i.e., delivery period, infant/fetus sex, and maternal race/ethnicity, are more suggestive of etiologic differences between the two types of cleft lip. Further investigation of the differences between CLO and CLP would appear to be warranted.

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Compassion in Medicine

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Presented at the White Coat Ceremony July 20, 2007

Good evening. First, I offer my warmest welcome to all the students in the Class of 2011 and your families and friends. To be very honest, as a Class of 1981 graduate, I envy you this moment in time, with the entirety of your professional lives still stretching out ahead of you, with so many new things waiting to be learned and with so many patients and families waiting to invite you into their lives. I would do anything to be able to come and sit among you and receive my white coat again.

Secondly, I welcome you because I believe absolutely that your presence will enrich our JABSOM 'ohana, each of you coming with your own life experiences and challenges, with your talents, passions, and dreams. And if we, as JABSOM faculty, take the time to listen, we will learn as much from you over the next four years, as you from us.

This evening I hope to share with you a few of my thoughts on "compassion in the practice of medicine." I was reminded that probably the most compassionate thing I could do this evening is keep my comments brief. I hope to do that. I admit it was difficult trying to bring my thoughts together around this topic. What is compassion? What forms does it take? Why is it important? Do I myself practice compassionate medicine? Regarding that last question, I am haunted by the words of my son who when he was 12 years old, after a disagreement with me, walked out the door saying, "Everybody thinks you're so nice. But you really *aren't* that nice all the time." So I approach this topic with a certain sense of humility. We all strive to be the perfectly compassionate physician (and parent), but never quite make it. But that of course is because we, like our patients, are human— and that is a good thing, of course.

So what *do* we mean when we speak of "compassion" and "the compassionate physician?" This past month I have had an opportunity to share thoughts on this subject with a close friend and colleague, Dr. Nancy Moules. She is a pediatrician and family support nurse with the pediatric oncology team at Kapi'olani Medical Center for Women and Children and Professor of Nursing at the University of Calgary. She has published extensively on the topic of providing compassionate care to families in pain.[1] Our conversations have helped shape my understanding of working with patients and families in need. Dr. Moules believes that there is a suggestion of meaning in the historical roots of the word. Etymologically, "passion" in the word "compassion" comes from Latin which means "the suffering of pain." "Com" [c-o-m] means "in combination or union together." Therefore, "com-passion" might be said to mean "the suffering of pain together." Or even more, she suggests, that compassion is the willingness to suffer together with another who is in pain, a willingness which is born out of love, and with the obligation and desire to attempt to alleviate that suffering.

The compassionate physician does not simply provide state-of-the-art evidence-based medical treatments and cures in the context of a clinic, a hospital, or an operating room, although these are essential parts of being a competent doctor. Instead, the compassionate physician connects with her or his patient in a very deep, personal, and human way. If we practice the art and science of medicine with compassion, we enter a relationship with our patients where, as Dr. Moules suggests, we listen, we see, we touch, and we feel the pain. Where, in fact, both doctor and patient suffer the pain together, each learning and changing together in the process of diagnosis, treatment, recovery, and sometimes death. Compassionate medicine is practiced in a non-hierarchical manner. It reflects a mutual relationship between two human beings, patient and doctor, each listening to and learning from the other, and in the process, each changing in her/his own way.

Earlier I said that maybe a good way to begin to understand the meaning of "compassion" is to examine its etymology. But that's all about words. In fact, for me the most powerful lessons about the meaning of compassion have come from my patients.

I would like to share with you two stories from my own career as an adolescent medicine physician that I feel have had a profound influence on my practice of medicine and maybe have brought me a bit closer to being the perfectly compassionate physician that all of us wish we could be.

My First Story

Fourteen years ago, sometime during my first months as a pediatrician at the Hawai'i Youth Correctional Facility (HYCF) I met a 16-year-old girl who I will call Kira. She had been at HYCF for three days and like all new adolescents coming to the facility, she was scheduled to come to my clinic for a comprehensive health interview and physical examination. The health interview covers a broad range of health issues, including both medical and psychosocial health topics. As we made our way through her health history, Kira told how she had grown up in Kaimuki in a family that included her Mom and Dad and three older siblings, including an older sister who had also been incarcerated at HYCF. Kira was repeating her sophomore year at Kaimuki High School and was continuing to get failing grades this school year. She had run away from home several times and hung out with friends in Waikiki, where, in her words, they "jacked" tourists for money, showered at beach showers, and lived in an abandoned apartment building off Kuhio Avenue. She had a boyfriend, 22-years-old, who occasionally beat her but whom she said she loved and missed desperately. They were sexually active and did not use protection. She had healing lacerations on both forearms that were self-inflicted with a pencil the day before. She had tried many different drugs since she was 11-years-old. At age 13, her older sister introduced her to "ice", which she described as her "drug of choice" and which she smoked daily.

Kira clearly faced profound risks to her health and well-being. I did not know where to begin or what to say. Our usual approach as physicians is to obtain a history, and then move on to diagnosis, education, counseling, prescription, and cure. Not sure what, but feeling I had to do something, I entered my comfort zone and began to talk with Kira about the risks and dangers of "ice" use. I remember clearly how, within a couple of sentences of launching into my teaching mode, Kira politely but firmly stopped me and said simply, "Look, Dr. Bidwell, just listen to me. If you grew up and every day saw your mother covered with blood after your Dad came home from work, from the time you were the littlest kid, you would be using 'ice' too." I suddenly realized that Kira was teaching me that she, not I, was the expert on her life, and that she had experienced things that I never have and hope I never will. She had had to make decisions about survival that I never had to make. And I suspected that she had probably seen things in her short life that taught her more about "ice" and its evils than I would ever know. And so I put down my chart and pen and said, "I've got lots of time, Kira, and a lot to learn. Can you teach me about your life?" And so she taught me what it is like to grow up in a home that is not a refuge but instead, a place filled with physical and sexual violence. She told me what it feels like to be a little girl and called "stupid", a "whore", and a hundred other names, by people who are supposed to nurture and love you unconditionally. She taught me what it is like to be kicked out of your home when you are 12-years-old and have no place to sleep, nothing to eat, and the many ways a young girl can survive in Waikiki. She taught me that in a perverted and scary sort of way how "ice" works, that at least for awhile it helps you forget the pain, to feel alive, to feel you can do anything, to feel on top of the world.

I learned many things about compassion from Kira that day simply by listening. Too often, perhaps, we, as physicians, fail to understand that our patients come by their adjustments to life honestly, and that they have a need and a right to make decisions based on their own experiences. Coming from positions of privilege and prestige, and often having life trajectories very different from those of our patients, we, as doctors, need to take time to listen, to learn; and, as best we can, to understand how humans make their choices. While I desperately did not want Kira to use "ice" or to sell herself on the streets of Waikiki, she taught me how these can become a part of a teenager's life in very understandable and honest ways. It made me much less likely to offer easy prescriptions such as "Don't do drugs" or "Go home to your Mommy and Daddy who love you." I learned that I do not always have an answer or a cure. Sometimes all I can do is listen with genuine respect and caring—with compassion, I guess—withholding judgment, open to learning all I can about my patients' lives and how they come to make the choices they do within the context of their lives, not mine or how I would like their lives to be. If I take the time to listen with compassion and respect to my patients' stories, perhaps they will make room for the words of counseling and support I might humbly offer in return.

My Second Story

The second story I would like to share with you is in some ways a more personal one. When it first came to my mind in preparing for this evening, I thought "No, I don't think I really want to share that," but it continued to haunt me and I realized that it was, in fact, one of the most important lessons about "compassion" that I have had in my career. More accurately, it is about my inability to provide compassionate care when it was very much needed. These personal failures can teach us a lot, too, if we take time to reflect on them.

I was a Fellow in Adolescent Medicine at the University of Washington in Seattle when I met Craig. He was a 17-year-old who came to my continuity clinic at Seattle Children's Hospital in the spring of 1986. His first visit was as a follow-up to his recent suicide attempt, a Tylenol overdose for which he had been briefly hospitalized. The reason for his suicide attempt was a mystery to everyone. He was an excellent student and athlete and was scheduled to enter the University of Washington on a swimming scholarship the coming fall. He had by all appearances a loving and supportive family. He had lots of friends and was an active member of a youth group in his church. He denied any substance use. He dated but had never been in a sexual relationship. He denied any history of physical or sexual abuse. His family said he had appeared somewhat withdrawn and unhappy over the past several months but not to a degree that raised any special concern. His suicide attempt was attributed to just a general adolescent funk that had brought him a little too low.

I continued to see him in my clinic every three-four months over the next year just to check on how he was doing with family, school, and friends. At each visit he would say that things were going fine and we would agree to meet again in another three-four months. Then, almost a year after his first suicide attempt, he made another attempt. This time, clearly more serious as his father found him tying his bedsheet to his bedroom rafter as a noose. Once again, there seemed to be no precipitating cause for his attempt, and after one post-hospitalization visit with me, he never returned to my clinic. As we say, he was lost to follow-up.

It was over a year later, in June 1988, when I saw Craig again. This time we did not meet at Children's Hospital but three miles away at Seattle's Volunteer Park during the annual Gay Pride Festival. It was not a total surprise to see Craig there, as I had always suspected, as his doctor, that he was gay and even suspected that it might have something to do with his trying to take his life. Certainly I had known then the research literature showing that in study after study the rate of suicide attempts among lesbian and gay youth is much higher than among their peers. That afternoon in Volunteer Park we did not talk about any of that. We briefly had a friendly chat, wished each other well, and have not seen each other since.

What did Craig teach me about compassionate care? Remember the definition of compassion I offered earlier: the willingness to suffer together with another who is in pain, a willingness born out of love, and with the obligation and desire to attempt to alleviate that suffering. Both I and, I believe, all the other health providers in Craig's life at the time of his suicide attempts failed to provide him the compassionate care he so desperately needed. We did not open our lives to him, to create a conversation that would have made room for him to safely share his struggle as he came to terms with his emerging gay identity and in which we could have offered reassurance and support.

To provide compassionate care we must be able to make space in our lives for another person – to listen to, see, touch, and feel the pain. And to open ourselves in this way as physicians we must come

*See "**Medical School**," p. 306*

Issues in Medical Malpractice XVII

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Question: Regarding physician liability arising from iatrogenic medication injuries, which of the following are true?

A. Doctor is liable if drug was not indicated for that condition.
B. Doctor is liable for failing to warn of serious risks.
C. Doctor is liable for failing to warn of a rare complication.
D. Patient did not ask about side effects and therefore was contributorily negligent.
E. Liability will attach to manufacturer for a "defective product."

Answer: A, B, C are correct

Choice A is correct because prescribing a drug without a proper indication amounts to breaching the standard of care, unless it is for an "off-label" use, which usually means there is some scientific evidence for using the drug in that manner. Choices B and C are correct because the informed consent doctrine requires that physicians discuss all "material" risks, including rare but serious risks. Finally, patients are assumed to have little or no knowledge of medications and they have no duty to inquire about their side effects. The doctor, on the other hand, has an affirmative duty to warn of these side effects. In a malpractice case alleging lack of informed consent for failure to warn, the defense cannot plead contributory negligence. D is therefore incorrect.

E is also incorrect. The "learned intermediary" doctrine stipulates that the doctor, not the pharmaceutical company, is liable for medication-related injuries as he/she is a learned professional who directly communicates with the patient and who does the actual prescribing. This puts the doctor in the hot seat for an adverse drug reaction, unless the drug company has been negligent in identifying and communicating the risk.

Disclosure of Material Risks

What constitutes a material risk is at the heart of the controversy surrounding the informed consent doctrine. Generally speaking, the patient should learn of all serious risks, even if unusual or rare. However, in one case, a 1% risk of hearing loss required disclosure,[1] whereas in another, the court appeared to say that a 1.5% chance of visual loss did not.[2]

Warren v. Schecter is probably one of the most dramatic cases to confront the material risk issue. The plaintiff won a $9.6 million judgment against the doctor for his failure to disclose risk of osteoporosis.[3] Dr. Schecter had performed gastric surgery on Janet Warren for peptic ulcer disease, and had warned the patient of the risks of bowel obstruction, dumping syndrome, and anesthetic death. He did not believe osteoporosis, osteomalacia, and bone pain were risks of surgery, and so did not discuss these risks with her. The plaintiff testified at trial that had Dr. Schecter warned of the risk of metabolic bone disease, she would not have consented to surgery. A second operation was undertaken because she developed post-op dumping syndrome and alkaline reflux gastritis, and the surgeon again failed to advise her of the risk of metabolic bone disease. She again asserted that she would not have consented to the second surgery had she been duly advised.

Plaintiff subsequently developed severe osteoporotic fractures, and filed a malpractice lawsuit alleging that Dr. Schecter was liable under an informed consent theory for performing surgery without advising her of the risk of bone complications. The jury found that Dr. Schecter did not disclose to Warren all relevant information which would have enabled her to make an informed decision regarding surgery and that a reasonably prudent person in Warren's position would not have consented to surgery if adequately informed of all the significant perils. Judgment was entered requiring a lump sum payment of $1,824,285 and periodic payments for future care totaling $9.6 million over 34 years.

In addition to requiring the disclosure of risks associated with surgery or a medication, courts have also looked at other aspects of disclosure in the doctor-patient relationship. Some litigated examples include disclosing the limited experience of a neurosurgeon,[4] financial incentives amounting to a breach of fiduciary responsibility,[5] and requiring a surgeon's disclosure of his positive HIV status[6] or his alcoholism.[7] However, in *Arato v. Avedon*, the California Supreme Court held that the law did not require physicians to inform their terminally-ill patients of their prognosis and life expectancy.[8]

Hawai'i's law on informed consent is codified in Hawai'i Revised Statutes §671-3. Recently amended by the 2003 legislature, the risk disclosure portion of the statute is set out in (b) 5:

> *(b) The following information shall be supplied to the patient or the patient's guardian or legal surrogate prior to obtaining consent to a proposed medical or surgical treatment or a diagnostic or therapeutic procedure:*
>
> *5. The recognized material risks of serious complications or mortality associated with:*
>
> *A. The proposed treatment or procedure;*
> *B. The recognized alternative treatments or procedures; and*
> *C. Not undergoing any treatment or procedure . . .*

Note that the law now requires the discussion of *"recognized material risks of serious complications or mortality,"* whereas the law it replaced used the phrase *"the recognized, serious, possible risks, complications and anticipated benefits."*This is thought to lighten the doctor's duty regarding risk disclosure, but in reality, the new language is unlikely to have a significant practical effect. An earlier 1976 version of the law more reasonably required the disclosure of "*probable risks and effects*."

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7. *Hidding v. Williams*, 578 So.2d 1192 (La.App. 1991).
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Medical School

to know and understand ourselves and be comfortable in who *we* are as human beings. Each of us, being human, carries within ourselves our own personal histories, vulnerabilities, fears, prejudices, and biases. These always affect how we interrelate with our patients and can sometimes get in the way of providing compassionate care.

In working with Craig, I was immobilized by my fears about my sexual orientation, to a point where I could not make room for him in my life and open up the possibility of sharing in his pain, as his physician. I could not ask him the questions I should have asked or provide him the support and reassurance I should have been able to give. My experience with Craig led me to promise myself that I would never ever again allow my discomfort or fear to get in the way of providing the comfort and support that my patients need.

Being human, of course, I have not always kept my promise to myself, but I have tried hard to do so. I promised myself, too, to try to grow in my understanding and acceptance of myself, something I have discovered will be a life-long endeavor. I struggle, as well, to continually challenge my discomforts and fears, judgments and prejudices so that I will be better able to provide compassionate care across the entire spectrum of the human experience. This, too, I recognize will be a life-long task, perhaps never fully accomplished, but still very important.

So those are my thoughts for the evening. Each of you will meet many of your own Kiras and Craigs throughout your professional lives. I believe that if you take the time to listen carefully to their stories, and reflect on how they intersect with your own lives as physicians and as human beings, they will teach you all you will need to know about providing care with compassion.

Thank you and all my best wishes for a wonderful four years at JABSOM. Welcome to our 'ohana! Thank you.

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1/2-1/6	Multi	Boston University School of Medicine	Grand Hyatt Kauai Resort and Spa, Kaua'i	24th Annual Conference on Obstetrics, Gynecology, Perinatal Medicine, Neonatology, and the Law	Tel: (617) 638-4605 Web: www.bu.edu/cme
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2/2-2/6	CCA, EM	Society of Critical Care Medicine	Hawai'i Convention Center, Honolulu	2008 Annual Meeting	Tel: (847) 827-6869 Web: www.sccm.org
2/4-2/8	R	NYU School of Medicine	The Four Seasons Lanai	Essentials of Imaging on Lanai: From the Head to the Toe	Tel: (212) 263-3936 Web: www.radcme.med.nyu.edu
2/6-2/9	Multi	Society of Laparoendoscopic Surgeons	Hilton Hawaiian Village, Honolulu	Asian-American MultiSpecialty Summit III: Laparoscopy and Minimally Invasive Surgery	Tel: (800) 872-1119
2/6-2/9	FP, GYN	Symposia Medicus	Maui Prince Hotel, Makena Resort, Maui	15th Annual Office GYN and Women's Health for Primary Care	Tel: (800) 327-3161 Web: www.symposiamedicus.org

2/9-2/15	OBG	Keck School of Medicine of USC	West Maui, Maui	Perinatal Medicine 2008	Tel: (800) 872-1119
2/10-2/15	GS	Mayo Clinic Scottsdale	Hapuna Beach Prince Wailea, Maui	Mayo Clinic Interactive Surgery Symposium	Tel: (480) 301-3580 Web: www.mayo.edu/cme/
2/11-2/15	CD	Society for Cardiovascular Angiography and Interventions	Mauna Lani Bay Hotel, Kohala Coast, Hawai'i	23rd Annual Cardiovascular Conference in Hawai'i	Web: www.scai.org
2/15-2/17	Multi	Hawai'i Academy of Family Physicians	Sheraton Waikiki, Honolulu	2008 Family Medicine Update	Tel: (808) 864-9812
2/16-2/19	OTO, HNS	Tripler Army Medical Center and the University of California, San Francisco	Hilton Hawaiian Village, Honolulu	Pacific Rim Otolaryngology - Head and Neck Surgery Update	Tel: (415) 476-5808 Web: www.cme.ucsf.edu
2/17-2/20	Multi	Hawai'i Thoracic Society	Wailea Beach Marriott Resort & Spa, Wailea, Maui	8th Annual Symposium: Current Concepts in Pulmonary and Critical Care	Web: www.ala-hawaii.org
2/17-2/22	R	University of California, San Francisco	The Fairmont Orchid, Kona	Neuro and Musculoskeletal Imaging	Tel: (415) 476-5808 Web: www.cme.ucsf.edu
2/17-2/22	IM	University of California, San Francisco	Grand Hyatt, Kaua'i	Infectious Diseases in Clinical Practice	Tel: (415) 476-5808 Web: www.cme.ucsf.edu
2/21-2/22	Multi	Hawai'i Medical Center	Hilton Hawaiian Village, Honolulu	2008 International Bioethics Conference: America's Broken Healthcare System	Tel: (808) 547-6050
2/21-2/26	GE	Keck School of Medicine of USC	Kaua'i Marriott Resort, Kaua'i	Medical and Surgical Aspects of Esophageal and Foregut Disorders: Pathiophysiology and Treatment	Tel: (800) 872-1119
2/27-3/2	P	American College of Psychiatrists	Hyatt Regency Kaua'i	Annual Meeting 2008	Tel: (312) 662-1020 Web: www.acpsych.org
March 2008					
3/1	Multi	Queen's Medical Center	Hilton Hawaiian Village, Honolulu	The Queen's Medical Center Conference on Quality & Patient Safety	Tel: (808) 537-7009
3/2-3/4	P	Mayo Clinic College of Medicine	Sheraton Kauai Resort Poipu Beach Kaua'i	Psychiatric Pharmacogenomics	Tel: (800) 323-2688 Web: www.mayo.edu/cme/
3/5-3/8	FP, IM	UCLA School of Medicine	Maui Prince Hotel, Makena Resort, Maui	Meeting the Challenge of Primary Care	Tel: (310) 794-2620 Web: www.cme.ucla.edu
3/10-3/13	C	Mayo Clinic College of Medicine	Grand Hyatt Kaua'i	Arrhythmias and the Heart	Tel: (800) 323-2688 Web: www.mayo.edu/cme/
3/17-3/20	FM, IM	Scripps Clinic	Hapuna Beach Prince Hotel, Hawai'i	Primary Care in Paradise 2008	Tel: (858) 587-4404 Web: www.scrpps.org/conferenceservices
3/17-3/21	R	Stanford Radiology Department, Stanford University School of Medicine	Grand Hyatt Kauai Resort and Spa, Poipu Beach, Kaua'i	16th Annual Diagnostic Imaging Update in Kaua'i	Web: radiologycme.stanford.edu/2008kauai/
3/23-3/28	Multi	Kaiser Permanente	Grand Hyatt Kauai Resort and Spa, Poipu Beach, Kaua'i	Kaiser Permanente Primary Care Conference	Web: www.kpprimarycareconference.org
3/30-4/4	IM	University of California, San Francisco	Wailea Beach Mariott Resort & Spa, Wailea, Maui	Primary Care Medicine: Update 2008	Tel: (415) 476-5808 Web: www.cme.ucsf.edu

Classified Notices

For more information call (808) 536-7702, Ext. 101, or go online: www.hmaonline.net.

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THE WEATHERVANE

RUSSELL T. STODD MD, CONTRIBUTING EDITOR

Russell T. Stodd MD

❖ OBSTACLES OF LIFE ARE THERE TO MAKE US BETTER.

After fifty years of the astronaut program, NASA (National Aeronautics and Space Administration) has loosened their visual requirements. In the past, many highly qualified people have been turned down due to rigid visual demands. Now after careful study, NASA will accept applicants who have had LASIK or PRK surgery or whose visual acuity is slightly less than 20/20. The move follows similar changes made by the Navy and Air Force in their eyesight standards. Vision limitations have been the number one disqualifying factor for NASA as well as the military, so this change is a major one. To apply for the NASA astronaut program applicants need a bachelor's degree in engineering, science or math plus three years of relevant professional experience. Each year NASA selects from 12 to 30 applicants from a pool of several thousands, so keep your enthusiasm in check.

❖ ADVERTISING IS THE ART OF MAKING WHOLE LIES OUT OF HALF TRUTHS.

Restylane, the cosmetic dermal filler which is being heavily marketed with direct-to-consumer advertising, is being threatened by *Artefill*, an amalgam of calf collagen and microscopic plastic beads. Restylane, like Botox, has a relatively short life span of 6 to 12 months, while Artefill, which has received approval from the Food and Drug Administration (FDA), is much longer lasting, perhaps even permanent. A Beverly Hills dermatologist, Arnold Klein, MD, who pioneered Restylane while working for Allergan at $250,000 per annum, is upset and claims the product may cause scarring and require surgical removal later. He is a consultant for Medicis Pharmaceuticals, maker of Restylane, so his opinion might be a trifle biased. The makers of Artefill claim the product is safe when injected according to research standards.

❖ FAITH IS THAT QUALITY WHICH ENABLES US TO BELIEVE THE UNBELIEVABLE.

A recent report in August 28, 2007, *Scientific American* reveals some startling data about new therapy for multiple sclerosis (MS). Current treatment with Copaxone and similar drugs serve to help the muscle weakness and movement disorders of MS, but have no effect on neuro-degeneration. Noting that symptoms of MS almost disappeared when estrogen levels were soaring during pregnancy only to see the disease return drastically after the baby was born, neurologists at UCLA embarked on a new course. Using estrogen beta-receptor hormone, researchers were able to counteract nerve cell degeneration without increasing the risk of breast and uterine cancers. Laboratory data showed that animals with known central nervous system inflammation regained motor control with no neuro-degeneration within 20 days of therapy. This is a truly exciting piece of research.

❖ OF ALL THE SEXUAL ABERRATIONS, PERHAPS THE MOST PECULIAR IS CHASTITY.

Sexual abstinence programs directed at young Americans have consumed $1.5 billion taxpayer dollars since 1982, and have been shown to be ineffective. After six tedious years trying to inject intelligence into the fallacious policies of the Bush religious right, one would expect a change to favor a rational approach to sex education with new Congressional leadership after the 2006 election. Surprise!! Instead, a Democratic-sponsored bill would increase funding to $141 million, a boost of $28 million, to fund more failing abstinence programs. Obviously, the religious right doesn't need conservative Republicans with dimwits like these in the Democratic leadership.

❖ MEN WILL MAKE PASSES AT GIRLS THAT DRAIN GLASSES.

The ancient college game of "chugalug" binge drinking has been replaced on some campuses by "beer pong". Rules vary, but typically the game is played on a 6-to-8 foot long table where partly filled cups of beer are arranged in triangles of six or ten (like pool balls) at each end. The participant can toss directly or bounce the ping-pong ball, and if it lands in a cup the opponent must consume the beer and remove the cup. The first team to run out of cups is the loser. A four-day annual tournament was held in Mesquite, Nevada, with $20,000 in prize money. "Those who dislike parties, pong, music, girls, trash-talking and gambling, need not apply." Naturally, there is a website with beer pong polo shirts and special rubber mats to soak up spillage. Ah, our creative youth!

❖ WHICH IS IT? MAN IS ONE OF GOD'S BLUNDERS, OR JUST THE OPPOSITE?

In an attempt to determine if belief in a supreme being alters a physician's attitude in caring for indigent patients, a research group from the University of Chicago and Yale New Haven Hospital reported their findings in the *Annals of Family Medicine*. The study included 2,000 physicians with a 65% response rate. 35% of non-religious doctors and thirty-one percent of religious doctors stated they would take care of people with little or no health insurance; a statistical toss-up. "People who are not religious generally believe that you have to help other people..." Apparently, physicians believe that caring for the poor is an expression of personal professional commitment, not a matter of theology.

❖ TEMPEST IN A BEE CUP.

In Taiwan, a "very skinny" 31-year-old woman was riding her motorcycle while wearing a low cut dress. An angry bee stung her right breast, and over the following 48 hours her right breast collapsed as the saline leaked from her augmented breast. Although the implant is supposed to withstand pressures of 200 kg (440 lbs), the surgeon who rebuilt the breast attributed the puncture to the lady's thin skin.

❖ WHAT PEOPLE LACK IN INTELLIGENCE, THEY MAKE UP FOR IN STUPIDITY.

From "pass a drug test" sources on the internet, drug-using morons have come to believe that Niacin (vitamin B 3) will mask illegal drug use. Emergency department docs now have to consider Niacin toxicity when a patient shows up with intense flushing, low blood pressure, and perhaps unconsciousness. These users believe large doses of niacin can rapidly flush drugs such as cocaine or marijuana from the body, and produce a negative drug test. Not only does the niacin fail to cover up drug use, it can cause heart palpitations, vomiting, blood sugar abnormalities, and liver failure.

❖ HE WAS NOT FLUSHED, MERELY DETHRONED.

In Kiev, Ukraine, the new museum has a display to illustrate the evolution of the toilet from the hole in the ground to the modern-day thunder closet. Vassily Kovulchuk didn't understand that the facilities were all a display so he left a deposit; "I didn't realize they were only to look at." The museum director was somewhat upset. The museum has now added signs "Not for use" to the various exhibits.

❖ THESE DOGS DON'T CHASE CARS. THEY SIT AT THE CURB AND TAKE DOWN LICENSE NUMBERS.

In New York City at *The Dog Run* you can take your doggie to swimming classes. According to pet swimming instructor Ms. Aldredge, it is a myth that dogs naturally know how to swim, although labradors or golden retrievers obviously do. Other breeds, "feel awkward and need help." Don't we all.

ADDENDA

- ❖ United States HIV patients live an average 24 years after diagnosis, and the cost of care in this period exceeds $600,000.
- ❖ The only state with no straight line border is Hawai'i.
- ❖ The aluminum can costs Coca-Cola more than the contents.
- ❖ Traveling in the Boeing 757 should be called "assistant coach."

ALOHA AND KEEP THE FAITH — rts■

Contents of this column do not necessarily reflect the opinion or position of the Hawai'i Ophthalmological Society and the Hawai'i Medical Association. Editorial comment is strictly that of the writer.

HER

ONLY COMPASS

IS

A MORAL ONE.

I AM A PATIENT NAVIGATOR. My job is to help cancer patients and families find their way amidst all the doctors, appointments, treatment options and support services we offer at the new Queen's Cancer Center. Cancer is intimidating, and cancer care can seem overwhelming without a helping hand to guide you. In fact, the Cancer Center is not only the leader in Hawaii on patient navigation – Queen's is also receiving national attention for our unique patient navigation model. At the Queen's Cancer Center, making the most of our comprehensive resources and all-in-one care isn't difficult. With my help, it's simply a matter of good navigation. For more information, please call 545-8777.

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