

News & Views

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Student Assembly**

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**APHA 134th Annual Meeting & Exposition Boston, MA,
November 4th – 8th, 2006
Highlights from the Student Assembly**

Inside This Issue

By: Kristy A. Siegel & Mariza Luna, Programming Committee Chairs

In a just a couple of months, the place to be is Boston, Massachusetts for the 134th APHA Annual Meeting & Exposition. Thousands of students and over 13,000 public health professionals are expected to converge upon the city prepared to learn, teach, network, and party. Everything starts on Sunday, November 5th at noon with Drs. Paul Farmer and Helene Gayle speaking during the Opening General Session. Following the Opening General Session, the Annual Meeting is officially kicked off. This also opens the Public Health Expo, the largest and most comprehensive public health exhibit featuring more than 675 booths of information, state-of-the-art products, and services geared towards public health professionals. Make sure to stick around the Expo Hall for the New Connections Reception beginning at 5:30 PM.

With so much to see and do and so little time at the meeting, it is important to plan ahead. Some not to miss Student Assembly events include APHA Member Orientation to the Annual Meeting & Student Assembly Orientation (#3189.0), the SA Social scheduled for Monday, November 6th at 8 PM, the SA career sessions, and the SA Strategic Planning (Business Meeting) (#420.0). At this year's career sessions, scheduled to speak are Drs. Barry Levy, Marian McDonald, and Victor Sidel during the general public health session, and Dr. Mary Anne Mercer, Ms. Alicia Ely Yamin, and a third yet-to-be-determined speaker during the international health session. We are also excited this year with the addition of 5 new student poster sessions and 3 new student oral sessions. You can see those sessions, as well as other not to miss student sessions at http://apha.confex.com/apha/134am/techprogram/program_603.htm. Support your fellow students by attending these sessions. For those of you in Boston or arriving early, you can attend the free 2nd Annual APHA-SA Student Meeting: Translating Research into Practice on Saturday, November 4th beginning at 8:30 AM. Registration is required and can be found at <http://www.aphastudents.org/docs/reg06.doc>. Space is limited, so register soon!

For more details on the city, the sessions, and the events planned during APHA 134th Annual Meeting & Exposition in Boston, MA, watch your inboxes in October for the SA Meeting Supplement – chock full of information, fun, and guides. The Programming Committee is also currently looking for planning committee members, who will be attending the meeting, to assist in event organizing, coordinating volunteer staffing, and overseeing onsite logistics. For an application and more information, please contact programming@aphastudents.org. **Hope to see you there!!**

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President's Pen

Meredith Masel, Chair APHA-SA



Dear Students,

A new semester is upon us and I know that you are busier than ever. As you plan the coming year, think about how your educational career is the beginning of your career as a professional. Think about how you can use the resources available to you now to have professional experiences that will be useful to you when you are interviewing and trying to explain why you know you can handle the challenges ahead. Start to identify situations in your life that are opportunities for professional development and the experiences of which will translate to your future job.

There are several ways to do this. One is to identify core concepts of professional actions and behavior that fit in at school and in a potential workplace. Some examples of these concepts are commitments to honesty, diversity, professional competence, responsible use of resources, or maintaining appropriate relationships¹. These are commitments that you can make during your educational career.

HONESTY: Academic honesty is one of the most important traits that we should have as successful students. If you are faced with poor research results, display them proudly and move forward. Don't cover them up by falsifying data. When you interview and are asked about one of the most difficult situations you faced in school, explain how your data were not sufficient to produce significant results but that you went through with your poster presentation and looked at it as an opportunity to learn about why non-significant results are important too.

DIVERSITY: You may be training to be a healthcare professional and you can take extra time for careful study of health disparities or cultural differences in healthcare to show your commitment to diversity. When you interview for your job in a non-profit healthcare facility, you can explain to them that your commitment began early in your schooling and you are looking forward to putting it into practice.

PROFESSIONAL COMPETENCE: Your learning doesn't stop at graduation. Take time now to go to departmental seminars and continuing education. If you start now you will be used to doing it when it is required for your job. This will help you to maintain the knowledge, skills, and attitudes that you need to be a competent student and professional.

RESPONSIBLE USE OF RESOURCES: You may not have an office supply closet tempting you right now, but you have other resources available to you that should be used responsibly. Time is a good example. Don't take advantage of fellow group members' time in a group project. Instead, do your fair share and use the experience to explain during an interview how effective you are when working in a team.

MAINTAINING APPROPRIATE RELATIONSHIPS: Have you ever felt like you were exploited by someone who was in a position of power? Does your major professor or lab director take advantage of you? Try to avoid that by sitting down with them at the beginning of each semester and initiating a discussion about expectations. This is an opportunity to set boundaries in advance so that when you are feeling like you're being treated unfairly you can address it with confidence that there was an agreement ahead of time about how you will both behave. If you do this, the experience will be extremely useful to you when you are on the job years from now.

I urge you to create these professional experiences for yourself this year because they are sure to contribute

to your practice outside of school, they will give you examples to use during interviews, and they will definitely make you a better student who is respected by your peers and faculty. Have a terrific semester and see you at the Annual Meeting in Boston in November! – Meredith Masel

1. University of Texas Medical Branch Professionalism Charter. www.utmb.edu/professionalism/charter/default.htm

American Public Health Association 134th Annual Meeting & Exposition



The APHA Annual Meeting & Exposition is *the* premier Public Health Educational Forum! Learn from the experts in the field, hear about cutting edge research and exceptional best practices, discover the latest public health products and services, and share your public health experience with your peers. The world of public health is in continual motion, and there is no better time to stay abreast of the research and learn about emerging issues.

The APHA Annual Meeting & Exposition is the oldest and largest gathering of public health professionals in the world, attracting more than 13,000 national and international physicians, administrators, nurses, educators, researchers, epidemiologists, and related health specialists. APHA's meeting program addresses current and emerging health science, policy, and practice issues in an effort to prevent disease and promote health.

For more information visit <http://www.apha.org/meetings/index.htm>



Public Health Events

APHA-SA Joins the 2006 *Covering Kids & Families* Back-to-School Campaign



Nearly 46 million Americans are uninsured and nearly 8.3 million of them are children. Many are eligible for low-cost or free health care coverage through Medicaid or the State Children's Health Insurance Program (SCHIP), but they may not realize their children are eligible. That's why the *Covering Kids & Families* Back-to-School Campaign is working to encourage parents to enroll their eligible children as part of their preparation for the new school year.

As a national supporter of this important effort, APHA-SA will join nearly 200 other organizations and the Robert Wood Johnson Foundation this August to launch the seventh annual *Covering Kids & Families* Back-to-School Campaign. In August and September, thousands of activities will take place across the country to encourage families to enroll their eligible, uninsured children in available coverage programs.

In most states, children in families earning up to \$40,000 a year or more are eligible for low-cost or free health care coverage. Although eligibility varies, programs exist in every state and the District of Columbia. These programs cover doctor visits, hospitalizations, prescriptions and more. The campaign encourages parents to call the national toll-free 1(877) KIDS-NOW hotline to find out if their children are eligible.

There are many ways you can get involved! Learn more about events in your community, download and order free planning guides and materials and find out about programs in your state by going to www.coveringkidsandfamilies.org.

National Primary Care Week, October 15-21, 2006 Addressing Health Disparities: Healing the Nation

By Darren Mays

National Primary Care Week (NPCW) is an annual interdisciplinary event organized by the American Medical Student Association (AMSA) that highlights the importance of primary care careers and serves as a resource for all health professional students interested in generalist medicine.

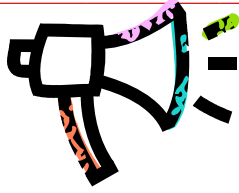
Goals of the week include:

- Improving health professions students' understanding of primary care careers
- Introducing students to local and national primary care leaders and role models
- Highlighting the many career options available through training in primary care
- Modeling the collaboration that can exist between primary care practitioners and their communities
- Encouraging students to participate in community-based projects
- Introducing students to the importance of policy issues surrounding primary care



NPCW Needs Your Help! Students are encouraged to help develop programs and events at their schools that make use of local and community-based resources.

For more information email NPCW@amsa.org or call 703-620-6600 x 204. For project ideas, tips, and additional information visit www.amsa.org/programs/npcw.



Announcements

Are you attending the APHA 134th Annual Conference?

If so, the Programming Committee is seeking Student Assembly members to serve on the Programming Planning Committee to assist with planning and working events sponsored by the Student Assembly!!!

If you are interested, please contact us at:
programming@aphastudents.org

It is a great way to become more active in the Student Assembly, meet fellow members, and have a great time in Boston!

Note: Please respond to this call only if you are registered to attend the annual meeting and note that no financial assistance for meeting costs will be supplied for serving on this committee.

Become a Campus Liaison!

Campus liaisons play a key role within the APHA-SA by helping to:

- Serve as their school's representative to (APHA-SA)
- Disseminate information about APHA-SA to students, faculty, and administration at schools offering health-related degree across the country and
- Facilitate a sustained dialogue between these schools and the APHA-SA.

Serving as a campus liaison does not require a large time commitment. Campus liaisons distribute information, for example, by stuffing mailboxes, posting fliers, speaking at new student orientations and to your school student government or association. APHA-SA will provide any materials (e.g. brochures) needed for this position. This position will also provide students with a unique opportunity to become more cognizant of national student initiatives within the American Public Health Association (APHA).

Download a job description for campus liaisons, an APHA-SA brochure, and a list of schools who are already represented at http://aphastudents.org/campus_liaisons.php

For more information, [email](mailto:campusliason@aphastudents.org) the Campus Liaison Subcommittee Chair at campusliason@aphastudents.org.

REGISTER TO VOTE

ARE YOU ATTENDING THE ANNUAL MEETING?

Request your absentee ballot

Election day (November 7, 2006) falls during the APHA Annual Meeting in Boston, Massachusetts. Make your voice heard at the ballot box by registering to vote and requesting an absentee ballot before your state deadline!

Visit <https://ssl.capwiz.com/apha/home/> for more information

Students' Experiences

Get out of the classroom and into the real world!

Summer School in Switzerland

By Rebecca Dennison, RN, BSN, UCSF 2nd year M.S. student

As a Master of Science degree student at the University of California, San Francisco, in the specialty area, Advanced Community Health & International Nursing, one is required to do a residency equivalent to 14 units. The overarching goal of the residency is to begin the transition into the advanced practice nurse role under the supervision of a preceptor/mentor, and projects can focus on areas including needs assessment, program planning, intervention and evaluation, policy analysis, and research.

Given the international aspect to my degree title and my love for travel, I immediately knew I wanted to do my residency abroad. Initially I thought about New Zealand or Australia, but unfortunately I did not get a response from the three agencies I had contacted. One of my advisers referred me to Khon Kaen University in Northeast Thailand where my case was accepted for faculty affiliation and I was granted a preceptor before deciding to apply for an internship with the World Health Organization (WHO). I had received an e-mail in March about opportunities for international work in nursing and midwifery services at WHO, but did not apply until applications were already under review. I was surprised and excited when the application led to an interview, and subsequently to acceptance as an intern.

I was anxious about asking to take off 8 weeks of work as an RN during the summer, but fortunately, I have an understanding and supportive supervisor who granted my leave of absence from California Pacific Medical Center. Within a month, I found myself in Geneva, Switzerland, headquarters for the WHO. Of the 8 work area openings, I was selected for "Integrated Care Standards". During the first 5 weeks of my 8 week internship, I conducted a literature review on several different integrated care programs at WHO, met with focal points in WHO priority programs (HIV/AIDS, Malaria, TB, and the "Making Pregnancy Safer" (MPS) program), and began generating an integrated care standards framework. By the end of my internship on September 1, I will also have collected feedback from the field, presented my work, and submitted a paper. Although I have a 10 year background in inpatient nursing in various areas and across the U.S., London, and Sydney, I knew little about HIV/AIDS, Malaria, TB, and MPS. Thus, this internship has been a learning experience in many different ways.

The WHO is divided into clusters, each with departments, and each of those with offices, all focused on the WHO mission of "the attainment by all peoples of the highest possible level of health". I highly recommend applying for a WHO internship to individuals of varying backgrounds and interests. In addition, Geneva is a great home base for European travel. Perhaps next year I'll head to Thailand.

For more information:

<http://www.who.int/employment/internship/en/>

http://www.who.int/hrh/nursing_midwifery/en/



Working with the New Orleans Health Department

By Tammy Lee, MPH, Tulane University, School of Public Health and Tropical Medicine

On May 13th 2006, I graduated from the Department of Health Systems Management at *Tulane University's School of Public Health and Tropical Medicine*. Before the big event, I interned for the *New Orleans City Health Department* from February to early May 2006, but I decided to continue my projects until late May. I chose a capstone that would improve my managerial skills and the Health Department would be the ideal place to gain more experience. Reasons that brought me to this conclusion were 1) the Health Department's post-Katrina staff was reduced to 63%, 2) I could learn more by working and assisting staff members, 3) I could participate in interesting projects such as rebuilding the New Orleans public health infrastructure, 4) I wanted to utilize my skills and knowledge from my past work experiences and Public Health Masters program, and 5) I heard the staff members were nice to work with.

My capstone supervisor was named Evangeline Franklin, MD, MPH. She was very effective with implementing and completing projects. I was very impressed that she was able to remember minor details and make the transition of speaking from one topic to another. I enjoyed working with her. She was very nice but she had a difficult time last year. Dr. Franklin and other staff members were in the Superdome during the hurricane, when the levees broke, and after the flood. During this catastrophe, Dr. Franklin lost her houses and dogs. She tried to collect as many items from her destroyed homes into her new apartment, which sometimes caused her to be away from the office and difficult to reach. Although Dr. Franklin was experiencing difficult times in her life, she accommodated my academic schedule and provided me with an enriched capstone experience. Before starting on my assignments, Dr. Franklin wanted me to be familiar with the Health Department, the projects they were involved in, and the city's post-hurricane situation. I felt the readings allowed me to understand and focus on the assignments I worked on. The following were the specific activities that I completed:

FEMA Project Worksheets: When I started the FEMA Project Worksheets, I worked with a contract worker. We attended the City's Project Worksheet briefings. I learned about each department's recovery efforts and the city's reconstruction process. Later, I worked on the project with a staff member. We analyzed FEMA Project Worksheets, which included timesheets and reimbursement forms for 1) Health Department employees who were working at the Superdome before, during, and after the hurricane, 2) for those who worked in Dallas after the hurricane, and 3) reimbursement forms to replace damaged health clinic equipments. The Health Department wanted the health clinics to be replaced by temporary mobile clinics because many of the clinics were severely damaged during the flood. I had the opportunity to view some of the photographs of the damaged clinics. Almost each clinic was completely destroyed and covered with mold.

Health Recovery Week at Audubon Zoo: In February 2006, Health Recovery Week took place at Audubon Zoo for a week. The Health Department decided to create this health event so those who lived in the greater New Orleans area could be seen by a doctor, dentist, and/or ophthalmologist, as well as having their prescriptions filled. The event was a great success, however, the Health Department underestimated the number of people that would arrive and there was a lack of volunteer healthcare workers. As a result, many New Orleans residents were turned away and the lines to be seen by a healthcare worker were very long. The Health Department decided to plan another Health Recovery Week for the Summer of 2006.



Secretary Mike Leavitt with staff from the New Orleans Health Department stationed in Dallas at the Convention Center. Also pictured are Dr. Ray Fowler from the University of Texas Southwestern in Dallas, who is the medical director on site at the Convention Center, and Dr. Evangeline Franklin with the New Orleans Health Department.

Source: US Department of Health and Human Services

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Internship Experience at the HIV/AIDS Bureau

By Zeida G. Rojas, MPH, DrPH Student, UNT-HSC School of Public Health

I have spent this summer in Washington D.C. at the Health and Human Services' HIV/AIDS Bureau (HAB). I was able to gain experience and knowledge on domestic HIV/AIDS policy related to the Ryan White Care Act (RWCA) which was enacted in 1990 as a response to the growing HIV/AIDS population in the United States and to promote the delivery of quality health and social services for financially disadvantaged and medically underserved people with HIV. I worked on two projects. One was developing policy recommendation for HIV/AIDS care along the U.S./Mexico border and the other was leading the beginning stages of a Health Information Technology (HIT) initiative.

The first project resulted in a report that will serve to guide policy regarding HIV/AIDS border health care through the RWCA. The major policy recommendations had to do with the implementation and sustainability of HIV/AIDS programs. These will hopefully help channel funding towards innovative interventions, some which are already being carried out in the field. The following are some of the policy recommendations based on the evaluation of existing HIV/AIDS programs along the border:

1. Develop a bi-national (U.S./Mexico) HIV/AIDS service network
2. Emphasize capacity building:
 - a. Comprehensive HIV/AIDS care is essential for appropriate care of HIV+ individuals and their families. It should consist of a support group consisting of clinical provider staff, case managers, and promoters or peer mentors. An HIV/AIDS support group must have individuals that act as bridges to essential services, such as housing, financial safety nets, substance abuse recovery centers, faith-based organizations and other needed services.
 - b. Provide comprehensive provider education on culturally competent HIV/AIDS care and ongoing education on recent developments in HIV/AIDS including the newest treatment options. Provide incentives such as convenient times for education sessions, self-education resources and continuing medical education credit (CME).
 - c. Development of a promotor network
3. Develop policy that assures client confidentiality. Educate all individuals involved in care, support and out reach of confidentiality measures.
4. AIDS policy for sustainability
 - a. Establish a functional organizational structure where individuals and entities have specific roles and responsibilities, but also has enough flexibility to change with the client needs.
 - b. Secure diverse partnerships and active participation of necessary human and financial resources through the inclusion of communities and all entities involved in HIV/AIDS services and care.
 - c. Develop a model for collaborative leadership that ensures accountability, shared responsibility and ownership of the program.
 - d. Develop and maintain an evaluation system that will measure successes, needed improvements, client needs and overall progress of the program to ultimately improve decision making at the local and national level.

The second project was a learning experience due to the fact that I had very little experience in Health Information Technology (HIT). I performed background research and analysis of HIT systems that are in place all over the country. From this our team put together an HIT program guidance and a call for proposals to fund the development and enhancement of HIT network systems. In 2004, HHS Secretary Tommy G. Thompson released a document outlining a 10-year plan to develop a national electronic health information infrastructure in the United States. The private sector has been utilizing information technology fervently and

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September is National Preparedness Month—Are You Thinking about Preparedness?

By Kimberly Affat, Yale School of Public Health

With September designated as “**National Preparedness Month**,” there is a big push for health departments and agencies to educate the community about the importance of disaster preparedness. This month is also significant as it marks the 5th year anniversary of 9/11, and 1 year after Katrina. Other significant events such as the tsunami and earthquake in Asia also emphasize the importance of disaster preparedness and response management. Everyone in public health should be thinking about disaster preparedness in some way: from the Epidemiologists, to the Social and Behavioral Scientist. Disasters affect all sectors of public health, and no matter what your expertise, you probably have something important to contribute to disaster preparedness and response. I encourage everyone to get involved in disaster preparedness projects at your local health department or community health center. Encourage your school to get involved with preparedness activities throughout the year and this month—National Preparedness month.

This past summer, I have been fortunate to intern at the [Yale Center for Public Health Preparedness](#), and contribute to the “push” to educate and strengthen the ability of the public health community to prepare and respond to disasters. My first task was to aid in developing a POD (Point of Dispensing) training needs assessment plan for the April, 2006 SNS (Strategic National Stockpile) drill in Connecticut. This drill tested Connecticut’s ability to respond to a disaster scenario that required the distribution of antibiotics to large amounts of people. The results from this assessment will be used to improve POD worker training for the next drill and in preparation for an actual emergency. I also assisted in developing monthly newsletters for both the public health community and the general population to deliver preparedness information.

My main project, which is still in development, is producing a disaster response pocket guide in collaboration with the [Connecticut Department of Public Health](#) (CT DPH) and local health departments. Yale Center for Public Health Preparedness proposed because public health workers do not have time to review hundreds of pages of emergency plans when a disaster strikes. A single, concise document that summarizes emergency plans and list issues that public health workers need to consider during an emergency will be a valuable resource for the Connecticut public health workforce. I began this project by reviewing current emergency and natural disaster plans drafted by CT DPH, as well as Linda Landesman’s book and pocket guide, [Public Health Management of Disasters](#). Recommendations from the Centers for Disease Control and Prevention (CDC) and the Federal Emergency Management Agency (FEMA) were also reviewed to be incorporated into the pocket guide.

I have consulted with CT DPH and several local health departments to propose the content, format, and intended audience of the pocket guide. It became a tremendous task to collapse the different emergency plans for Connecticut into one pocket-sized document, and to effectively address what public health workers should know and do when asked to respond to specific incidents in Connecticut. Fortunately, YCPHP and CT DPH have an excellent cooperative relationship due to collaboration on past projects, and YCPHP has worked closely with local health departments on the SNS drill. These past activities have made working together on this task easy. Being able to work with these groups is also valuable because without input from potential users of the pocket guide, an effective product cannot be developed. The pocket guide will contain information pertaining to different natural disasters, infectious disease outbreaks, and radiological and chemical emergencies. When the pocket guide is complete, I hope to evaluate its functionality via survey during Connecticut’s next disaster response exercise and during a tabletop exercise.

Throughout the year, I will continue to work at YCPHP to complete the pocket guide and continue to promote preparedness education. Find out what activities are taking place at your school for National Preparedness Month, or maybe organize an activity of your own.

For preparedness resources, please visit the Yale Center for Public Health Preparedness website at <http://publichealth.yale.edu/ycphp> and for more information about the Centers for Public Health Preparedness across the U.S. please visit <http://www.asph.org/acphp>.

MEASURING HUMORAL IMMUNE RESPONSE TO HUMAN PAPILLOMA VIRUS 16: IMPACT OF ANTIGEN PREPARATION

By Dianne Frankel, M.P.H., *University of South Florida College of Public Health*

This past summer I was awarded the Dr. James A. Ferguson Emerging Infectious Disease Summer Fellowship at the Centers for Disease Control and Prevention. The Fellowship involves the collaboration of the Minority Health Profession Foundation (MHPF) and the CDC to offer opportunities for minority students to be introduced into the public health field. The two month fellowship was an excellent experience which allowed me to be exposed to current research development, meet leading public health officials, and increase my knowledge of public health practices. I recommend students apply for any fellowship/internships offered by MHPF and the CDC. This article is a description of a research project about HPV that I worked on while at the CDC.

HPV is the most common sexually transmitted disease among individuals, and is predominately found in the younger population. HPV 16 accounts for about 50% of cervical cancer, which is the second leading cause of cancer deaths in woman worldwide. In this study we compared the specificity and sensitivity of the Virus-like particle (VLP) based - Enzyme-linked immunosorbent assays (ELISA) method to that of the Pseudovirion (PV) -based neutralization assay for detection of HPV 16 antibodies.

The 'gold standard' for the detection of HPV in sera has been ELISA using VLPs. However, the pseudovirion-based neutralization assay is thought to be more specific as it detects only neutralizing antibodies, unlike the ELISA which detects cross-reacting antibodies to HPV. Prior to testing of samples by ELISA, the optimum antigen concentration, conjugate dilution and appropriate positive and negative controls were determined. Serum samples were collected from 210 women attending urban public health hospital colposcopy clinics in Atlanta, Georgia, and Detroit, Michigan, between December 2000 and December 2002. These women were enrolled as part of an ongoing study of the Early Detection Research Network (EDRN) study for cervical neoplasia. The recruited participants were non-pregnant, HIV-negative women between the ages of 18–69 years.

Seventy-eight out of 210 serum samples (37.1%) were positive for HPV 16 in both the PV and ELISA assays. Of these, 18.1% were positive only by PV assay, whereas 2.9% were positive only by ELISA. Eighty-eight (41.9%) of the samples were negative for HPV 16 antibodies by both the PV and ELISA assays.

The results we found imply that the VLP-ELISA assay is less specific and sensitive than the PV assay. The ELISA assay may be detecting non-specific or cross-reacting antibodies as opposed to the PV assay which detects only neutralizing antibodies. The PV assay also provides antibody titers which would be important when measuring response to the vaccine. Furthermore, the PV assay can detect both recent (IgG antibodies) and past (IgM antibodies) infections; however; the ELISA can only detect IgG antibodies. We determined that the pseudovirion assay could be used for evaluating potentially protective antibody responses in natural history and prophylactic vaccine studies.

I would like to thank Minority Health Profession Foundations and Centers for Disease Control and Prevention for this opportunity. I appreciate the help, support, and immense knowledge of my mentors, Gitika Panicker, Ph.D. and Elizabeth Unger, Ph.D., M.D. Furthermore, I am grateful for the assistance of Kristi Meadows, Emily Blalock, and Caitlyn Kryston with the laboratory assays.

References:

Karem K, Poon AC, Bierl C, Nisenbaum R, Unger E. Optimization of a human papillomavirus-specific enzyme-linked immunosorbent assay. *Clin Diagn Lab Immunol* 2002 May; 9(3):577-582.

Rajeevan M, Swan D, Nisenbaum R, Lee D, Vernon S, Ruffin M, Horowitz I, Flowers L, Kmak D, Tadros T, Birdsong G, Husain M, Srivastava S, Unger E. Epidemiologic and viral factors associated with cervical neoplasia in HPV-16-positive women. *Int. J. Cancer*. 2005; 115:140-120



Continued from page 7—New Orleans Health Department

At the February event I supervised and assigned healthcare workers and public health students' volunteer rotations. At 6:30am and at noon, I went to each healthcare section and asked if volunteers were needed and how many volunteers they needed. When the volunteers came, I asked them what they were interested in and I assigned and brought each person to their volunteer location and supervisor. I wanted the volunteers to enjoy their experience. I thought this strategy would enhance the Health Department's reputation, which will increase volunteerism, ranging from returning volunteers to new volunteers, for future events.

Hurricane Preparedness Committees: I participated in City Hall's Hurricane Preparedness Committee. The committee worked very hard to decide on the evacuation route, housing issue, pick-up area, evacuation date and time, type of transportation needed, identified those who had special needs, identified evacuation leaders, and identified resources the Health Department and patients should leave with. In addition, I participated in Homeless Hurricane Preparedness Subcommittee, where we decided how we were going to inform and evacuate those who were considered special needs patients and who were homeless.

Electronic Medical Record (EMR) Program: At the Health Department I learned how to use the EMR program and I was in charge of coordinating the program and training health employees and volunteers to use it. Last hurricane season, many medical records were left behind and destroyed in the flood. The Health Department did not want newly created medical records destroyed. The EMR Program allowed patients to evacuate with their medical records with a thumb drive or a mini-CD and visit a new healthcare professional with greater ease. The medical information contained their name, contact information, type of insurance, medical history, drug prescription, etc. Patients were not allowed to alter their medical records. EMR could only be opened with an EMR program and by a credentialed health professional and/or organization.

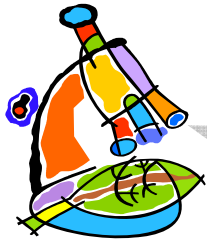
Before the hurricane catastrophe, there were about 200 Health Departmental employees. In the aftermath of the hurricane, there were about 75 employees, about a 37% decrease. The missing employees were either laid-off because they did not come back to work after the hurricane, were very stressed and resigned from their positions, lost their homes and decided to restart their lives elsewhere, or had other priorities. The Health Department employees who stayed were overworked and stressed. Many of these employees were working 2-3 people jobs and sometimes overtime. In addition, many of them lost their homes and valuables. The stress level remained high for many of them, as they tried to predict who would be the next elected mayor and the situation for next hurricane season.

I enjoyed working with the people at the Health Department as I was treated as part of their staff. Although the health department and the staff had gone through difficult situations, I obtained valuable knowledge and experience and would recommend those who would like a variety of experience to work at a Health Department and make a contribution to the community it serves.

Continued from page 8 –Internship Experience at HIV Bureau

our health care system has been lagging behind. We live in a mobile society, a society with disparate socio-economic status, health care access and needs. We are a multi-racial, multi-cultural and multi-needs population. These needs increase when providing services to an HIV/AIDS client. AIDS affects all aspects of life, not only the physical, but mental, social and economic.

It is believed that Health Information Technology will be a tool for health care providers to improve the delivery of quality health care to HIV positive clients. The network of information exchange includes access to medical, laboratory, diagnostic, and medication data, as well as, health maintenance records, service utilization and support services such as counseling and testing, case management, substance abuse, mental health, and billing information from each network site. A comprehensive HIT network will connect all points of service provision to allow for the seamless tracking of client medical information from one point of service to another.



Research



Creating a Supportive Breastfeeding Environment: Evaluating a Website on Infant Feeding for Child Care Providers

By: Alena Clark, MPH, RD, PhD Candidate,
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Breastfeeding and the use of human milk have been shown to provide health, nutritional, immunological, developmental, psychological, social, economic, and environmental benefits^{1,2}. Breastfeeding is also associated with reduced morbidity in infancy, and may reduce risk of chronic diseases later in life¹. The United States Department of Health and Human Services and the American Academy of Pediatrics^{1,2} recommend that infants be breastfed exclusively for the first 6 months of life and continue to be breastfed along with appropriate solid foods for at least the first year of life.

Even though the benefits are well known, many mothers choose not to breastfeed or cease breastfeeding before the recommended time. Healthy People 2010 established the goals that at least 75% of all United States mothers initiate breastfeeding, at least 50% continue breastfeeding for 6 months, and for at least 25% of infants to be breastfed until one year of age³. Despite recognized benefits, many states fall below the Healthy People 2010 Guidelines for initiation and duration of breastfeeding. In 2001, the Centers for Disease Control conducted the National Immunization Survey to assess how states were achieving the Healthy People 2010 goals for breastfeeding. Only 14 of the 50 states met the goal that 75% of all United States mothers initiated breastfeeding their infant. Colorado exceeded the national recommendations of initiating breastfeeding at 83%, yet fell short for duration at 6 months and one year, 46% and 21% respectively⁴.

In 2002, the fourth most common reason Colorado mothers cited for ceasing breastfeeding behind “not producing enough milk”, “did not satisfy baby” and “baby had difficulty nursing” was because they returned to work or school⁵. There were 61 million working women in the United States in 2001 and nearly three quarters of all mothers in the United States are in the work force⁶. Every day, three out of five children are in child care. This includes roughly 6 million infants and toddlers⁶. The percentage of children enrolled in child care has more than doubled from 30% in 1970 to 70% in 1993⁶. Children who attended day care at 6 months were significantly less likely to have ever been breastfed or remain exclusively breastfed at 7 days, 1 month, 3 months, 6 months and 12 months⁴. With the decline in breastfeeding often coinciding with mothers returning to work, this is an area deserving of more research.

There is a need to better assess the knowledge, attitudes, behaviors and educational needs of child care providers on breastfeeding and provide those educational needs in a medium that is effective and desired.

Needs Assessment

A needs assessment (N=267) survey exploring the role of child care providers on supporting working breastfeeding mothers was completed during the first phase this project. Surveys were received from 73 child care centers (27% response rate) in Colorado. A total of 201 teacher (19% response rate of 1068 possible) and 66 child care director (25% response rate of 267 possible) surveys were received with an overall response rate of 20%. Locations of the centers were spread evenly among rural (29%), Denver metro (33%) and other metro areas (38%). The majority of centers had a breastmilk and formula feeding written policy. A low number (25%) of respondents answered correctly on appropriate storage times for both breastmilk and formula. Providers desired information on breastfeeding, bottle feeding and bottle feeding and introducing solid foods.

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The relationship between pre-pregnancy BMI and folic acid related birth defects among women of advanced maternal age in Florida

Julie Ackerman, MPH

BACKGROUND

In the United States, over the past three decades, there has been a consistent trend toward women delaying child-bearing until their late 30's and 40's. Between 1970 and 1990, the rate of first births in the United States increased by more than 100 percent for women ages 30-39 years and by 50 percent for those ages 40-44 years. This increase is believed to be the result of a combination of social, educational and economic factors.

Pregnancy later in life overlaps with the onset of chronic and life threatening diseases. Understanding how chronic conditions during pregnancy, such as obesity, affect childbearing outcomes is increasing in importance as the prevalence of overweight and obesity among pregnant women continues to rise. According to the Florida Pregnancy Risk Assessment Monitoring System (PRAMS) 2000 survey data, 33.1 percent of new mothers in Florida were either overweight or obese prior to pregnancy. Compared to women with normal weight, women who were overweight or obese prior to pregnancy had a significantly increased risk of having an infant with an NTD, especially spina bifida. The most common explanation is that NTDs are a malformation caused by folic acid deficiencies during pregnancy. Cleft lip with or without cleft palate (CLP) is another malformation caused by a deficiency in folic acid.

It has been suggested that high BMI changes the folate availability, and 400 mg a day might not provide the same level of protection against NTD and CLP in overweight and obese women as compared normal weight women. Therefore, women who are overweight and obese may require a higher dose of folic acid than women of normal weight. The objective of the current study is to examine the relationship between prepregnancy weight and folic acid-related birth defects among women of advanced maternal age in Florida.

METHODS

A population-based, retrospective cohort study was conducted using Florida Birth Vital Statistics records merged to the Hospital Discharge Data and Florida Healthy Start Prenatal Risk Screens of infants born between 1999 and 2003. Information concerning mother's age, marital status, education level, Medicaid eligibility, smoking use, race, and birth defects were obtained from the Florida Birth Vital Statistics records. Mother's height and prepregnancy weight were obtained from the Florida Healthy Start Risk Screen Instrument and used to calculate prepregnancy BMI.

All women who were 35 years of age and older, who had a singleton birth, and who had both height and prepregnancy weight recorded on the Florida Healthy Start Risk Screen Instrument were included in the study. Mother's race, education level, marital status, Medicaid eligibility, and smoking were potential confounders and were controlled for statistically. Pregnancies were excluded if age at birth, prepregnancy weight, or height were not plausible. The women were then categorized into two groups based on their BMI. The first group consisted of women with a normal BMI (18.5 to 24.9). The second group consisted of women who were overweight and obese BMI (≥ 25). The outcome variable was an infant with a folic acid related birth defect, such as NTD (anencephaly and spina bifida) and CLP.

Poisson regression, a type of General Linear Model procedure, was used to analyze the relationship between prepregnancy BMI and folic acid related birth defects among women 35 years of age and older. Analysis was conducted using the Statistics Analysis Software (SAS) version 9.0.

RESULTS

Between 1999 and 2003 there were 1,024,616 total births in the state of Florida. Of those 144,759 (14.1%) were to women 35 years of age and older. After merging the Florida Birth Vital Statistics records to the Florida Healthy Start Risk Screen records, limiting the data set to only women 35 years of age and older, singletons, and those who had a BMI greater than 18.5, the study population consisted of 19,602 births. 9,525 infants (49.0%) were born to mothers with a normal BMI, and 10077 infants (51.0%) were born to mothers who were overweight or obese BMI. Among these infants 12 (0.06%) were born with a folic acid-related birth defect. Six infants (0.03%) were born to mothers who had normal prepregnancy BMI and six infants (0.03%) were born to women who were overweight or obese. After controlling for mother's race, educational level, marital status, Medicaid eligibility, and smoking, the adjusted relative risk was found to be not significant (adjusted relative risk [ARR]=0.8588, 95% CI 0.2637, 2.7965).

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The top perceived advantage for formula over breastmilk was that it is “easier to feed” while the top perceived disadvantage was that it is “not as healthy”. The top perceived advantage for breastmilk over formula was that it facilitated “better bonding” yet the top perceived disadvantage was that it made it “harder for infant to leave mother”. Results indicated that child care providers do feel they have an important role in supporting parents’ choices on what they are feeding their infants (84%). Eighty-three percent desired a website targeted towards child care providers that contained bilingual and up-to-date infant feeding information.

Group Discussions and Process Evaluation

Based on the needs assessment survey results, group discussions (N=5) were held with child care providers, directors and child care health educators to determine their specific needs for a website on infant feeding, specifically breastfeeding, for child care providers. Participants desired a straightforward site without flashy graphics due to download time; clear links to infant feeding information; logo with warm, “baby” colors; links to other helpful infant feeding websites; credentials and contact information of web designer; handouts in both English and Spanish that are easy to print; and a disclaimer that the website does not replace health professional advice. The ***InfaNET Nutrition for Child Care Providers*** website was developed (www.infanet.cahs.colostate.edu). A process evaluation (N=20) occurred for one month and providers were allowed to use and evaluate the website at their own discretion. The results of the process evaluation determined that the content and visual/graphic design of the website was appealing to child care providers, infant feeding experts and website designers.

Current and Future Research

Current research includes a quasi-experimental research design to determine if ***InfaNET Nutrition for Child Care Providers*** website is an effective means of providing infant feeding information to child care providers as well as a means to elicit changes in practices to create a supportive environment for breastfeeding in child care centers.

References

1. American Academy of Pediatrics. (2005). Breastfeeding and the use of human milk. *Pediatrics*, 115: 496-506.
2. U.S. Department of Health and Human Services, Office on Women's Health. (2003). Benefits of breastfeeding. *Nutrition in Clinical Care*, 6: 125-131.
3. U.S. Department of Health and Human Services. (2000). Healthy People 2010, Volume I, 2nd Edition.
4. Li, R., Darling, N., Maurice, E., Barker, L., & Grummer-Strawn, L. (2005). Breastfeeding rates in the United States by characteristics of child, mother or family: the 2002 National Immunization Survey. *Pediatrics*, 115: e31-e37.
5. Colorado Pregnancy Risk Assessment Monitoring System (PRAMS) data. (2002). Colorado Department of Public Health and Environment: Denver, Colorado.
6. Business and Professional Women's Foundation. 101 Facts on the Status of Working Women, 2003. Retrieved on January 30, 2005 from <http://www.bpwusa.org>.

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DISCUSSION

This study concluded that overweight/obese women 35 and greater were not at higher risk of folic acid related birth defects compared to normal weight women in the same age group. A possible explanation for why no relationship was found is the small number of birth defect cases within this study sample. Another possible explanation is that women of advanced maternal age may be getting enough folic acid regardless of their BMI. According to Florida PRAMS 2000 data, women of advanced maternal age are more aware of the benefits of taking folic acid, and therefore are more likely consume folic acid during the month before pregnancy than their younger counterparts. Women who take folic acid prior to and during pregnancy possess the same characteristics of women who delay childbearing. These are non-Hispanic White women, with more than a high school education, a higher income, not eligible for Medicaid, and married.

There are a few limitations in this study. First, the study sample is not generalizable to the general population. The study sample consisted of women who gave birth in Florida and who had completed the Florida Healthy Start Risk Screen. Women who complete the Florida Healthy Start Risk Screen may be different from those who did not complete

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the Risk Screen. Second, only women who gave birth to singletons were included in the study; women who had multiple births were not included because of potential confounding. Offspring of multiple gestations are at an increased risk for abnormalities.

Finally, information on folic acid intake of the women in the study sample is unknown. It is possible that there was a difference in the folic acid intake between the two weight groups. This difference would make the populations not comparable.

Given the limitations of this study, further research needs to be done. One approach would be to further the question qualitatively. Case studies could be conducted on women who have infants with folic acid related birth defects to provide researchers insight to what puts these women at an increased risk of delivering an infant with a birth defect. Important aspects to consider about these women are: medical history, knowledge of folic acid, diet and folic acid intake prior to and during pregnancy, living and working conditions, education level, and alcohol and drug use during pregnancy.

Watkins, M. L., Rasmussen, S. A., Honein, M. A., Botto, L. D., & Moore, C. A. (2003). Maternal obesity and risk for birth defects. *Pediatrics*, 111(5), 1152-1158.

Mojtabai, R. (2004). Body mass index and serum folate in childbearing age women. *European Journal of Epidemiology*, 19, 1029-1036.

A little history of Patient Safety

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The science of patient safety is young in the United States. The 1970s marked the start of an impressive empirical analysis¹ on provider-based medical injuries; almost three decades later, a formal report of this public health problem was broadcasted to the nation. Every year, medical errors produce at least one million serious medical injuries; approximately 48,000 to 98,000 Americans die from this. Using the lower estimate, medical error deaths surpass fatalities from breast cancer, car accidents, or AIDS; this costs the U.S. health care system at least \$17 billion per year.³ It is instructive to reflect on how accountability of provider malpractice affected patient safety to set in motion.

In the U.S., the origins of acting on medical misfortune date back to the 19th Century. A provider's misfortune was attributed to the concept of divine providence; when misfortune events occurred, the public accepted it as God's will. The societal belief of providence, combined with low medical expectations and the doctor-patient therapeutic relationship, benefited a provider to win cases brought against him or her.²

Changes in American culture and history begin to paint a picture of society's concern with malpractice. Historian and lawyer Kenneth De Ville argues three shifts⁵ to explain 21st Century society's focus on medical errors: (a) The weakening of providential views, beginning in the 18th Century,⁵ shifted mentality to human causation, blame assignment, and a means of justice; (b) beginning in the mid 19th Century, the growth of expertise, knowledge, and technology in five areas of medicine – orthopedics, surgery, anesthesiology, obstetrics, and diagnosis – increased professional and public expectations of care. This demanded, professionally, a higher degree of knowledge and skill than before; and (c) during the mid-20th Century onwards, society began to view the medical profession in a contractual, than therapeutic, relationship. The specialization of medical care focused less on the single provider enterprise; instead, patients started to visit an array of specialist clinicians for illnesses.

According to historian James Mohr, the perpetuation and expansion of the fields of medicine and law further illuminates the landscape of malpractice concerns.⁴ According to Mohr, medicine builds upon three concepts – (1) a continuous drive to improvement, (2) aim to standardized clinical practice, and (3) the development of liability insurance; the legal malpractice system is raised from three factors – (1) a contingency fee work, (2) civil-jury trials, and (3) the tort system.⁴ Today, these six components remain in place; they influence how the science of patient safety and medical errors is studied.

The evolution of the hospital environment further describes this picture. The advent of the modern hospital and managed care, in the early 20th Century, and the placement of patient safety (a subset of quality of care) responsibility from trustees to physicians. Most board members today continue to believe that a patient's quality of care is the provider(s) main responsibility.⁸ This leaves one to ask: Has advancements from the past two centuries in hospital care and medicine overall reached the public and professional expectations that quality and safety is now the priority aim to achieve? It seems so.

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The Danger of AIDS Denialism

By Elizabeth Gallon, James Madison University

For every disease imaginable there are people who will question its precise origin and scientific consequences. Even as we progress further into the scientific age, making access to evidence easier than ever before, there continue to be dissenters. Luckily, public health professionals are familiar with these populations. In fact, most have even come to expect this diversion from the mainstream, preparing programs and utilizing education techniques to combat their radical ideas. Because of these efforts, many myths once thought to be true have now been proven false. For example, very few people still believe that kissing frogs will give you warts or that crossing your eyes will make you blind.

Unfortunately, a growing group of alternative thinkers are today dealing with more serious health topics. In fact, they are dealing with the deadliest disease the world has ever encountered. They are collectively known as “AIDS denialists” and they challenge our current medical understanding of the HIV/AIDS progression. By definition, AIDS denialists are those who “deny, challenge, or question aspects of the main scientific view that the human immunodeficiency virus ([HIV](#)) is the sole cause of acquired immune deficiency syndrome ([AIDS](#)) (<http://en.wikipedia.org/wiki/AIDSdenialist>).” At first it may be easy to dismiss them as a drastic and outrageous group that is completely without merit. But upon reading their literature and seeing the accomplished or influential people that back them, you’re likely to become uneasy with their presence altogether.

The group is made up of scientists, academics, doctors and people who are HIV positive or living with AIDS. Their theories vary greatly and as a whole they have yet to create a cohesive point of view. Some believe HIV is a governmental or pharmaceutical conspiracy. Others think AIDS is not an infectious disease, or that it is treatable and curable without any medical intervention. Still, there are others who believe it simply does not exist. No matter what these individual members believe, as always their actions speak louder than words. They create and distribute what can only be labeled as dangerous propaganda to vulnerable members of society. They are forceful in their insistence that “the virus is harmless” (or, in some extreme cases, non-existent) and that standard medical practice should be abandoned (<http://www.aidstruth.org/>). They especially target those with HIV/AIDS and government health officials. This group looks years of research and biological evidence in the eye, refusing to recognize its validity. They question HIV testing reliability, the behavior of AIDS as a disease and the actual consequences of infection – all things that people must believe and understand to prevent infection.

Not only is this group dangerous in the sense that they can poison unsuspecting minds, it is also a drain on precious and limited resources. AIDS advocacy and non-profit groups must spend valuable time and money combating this campaign of lies. AIDStruth.org is one of the many websites dedicated to answering AIDS Denialists and AIDS lies. For years one of the battles lay in convincing the world that AIDS isn’t a homosexual disease, and there is still much to accomplish in that area. AIDS denialists continue to undermine and challenge this progress. The effects have already been felt in South Africa, where two top ranking officials have become sympathetic to the denialists. South African President Thabo Mbeki and Health Minister Manto Tshabalal-Msimang have limited access to anti-retrovirals and have put the health of an entire nation in the hands of alternative therapies.

AIDS is a worldwide battle and a medical reality. It is obvious that we cannot afford to have this position gain any more momentum than it already has. Without proper testing, education and financially backed prevention efforts, AIDS will continue to grow, wreaking more havoc and costing more lives than it already has. Let’s not allow denialists to steal any more spotlight from a pandemic that deserves only serious support and attention.

References:

The Scientific Evidence for HIV/AIDS. (2006, August 21). *AIDS Truth*. Retrieved August 25, 2006 from <http://www.aidstruth.org/>

Wikipedia, The Free Encyclopedia. (2006, August 24). *AIDS Reappraisal*. Retrieved August 25, 2006 from http://en.wikipedia.org/wiki/AIDS_denialist



Lipodystrophy: Managing this Adverse Effect of HIV Drug Therapy

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At the end of 2003, an estimated 1,039,000 to 1,185,000 persons in the United States were living with HIV/AIDS. The Centers for Disease Control (CDC) has estimated that approximately 40,000 persons become infected with HIV each year. Through millions of dollars invested in drug research, today's HIV medications allow HIV-positive people to live longer, healthier, and more active lives. Unfortunately, these powerful medications can have a wide range of side effects. One health problem feared by many HIV-positive people is known as lipodystrophy. Although lipodystrophy is not the most dangerous condition faced by HIV positive patients, it still poses a concern for medical professions in maintaining the quality of life for these patients.

When medical professionals diagnose lipodystrophy they are referring to a type of metabolic complication associated with a disturbance in the way the body makes, uses and stores fat. It can result in either fat loss (lipoatrophy) or fat gain (lipohypertrophy). And although HIV experts do not know the cause of this side effect, they are doing their best at trying to control it.

Lipoatrophy

Lipoatrophy, or fat loss, is often confused with AIDS Wasting Syndrome; however, the two are completely different. In lipoatrophy people lose fat in specific areas of the body, usually the arms and legs. People with AIDS Wasting Syndrome lose fat and muscle all over their body and is most often associated with late stage HIV.

Doctors first began to notice lipoatrophy in HIV positive patients in the late 1990's, after modern HIV drug treatment became available. And with most HIV patients on a regimen of three or more drugs, the risk of this side effect greatly increases.

Which HIV medications are to blame and why do they cause this change in fat cells? Research has shown that some HIV drugs damage the mitochondria inside fat cells. When this organelle dies, the fat cell is lost; causing the resulting lipoatrophy. The drugs most often associated with lipoatrophy are Zerit, Retrovir and Videx.

Currently, if a person is experiencing lipoatrophy they should switch medications. Unfortunately this does not cause the fat to return but it will slow further loss. In addition, people should become involved in a strength training program to build lean mass and maintain shape to the legs and butt.

Lipohypertrophy

The other extreme of lipodystrophy is lipohypertrophy, or fat gain. This increase in fat is often localized to the abdomen, neck and breasts. The increase in fat around the abdomen is of particular concern as this fat depot is associated with an increased risk for heart disease and insulin resistance. Like lipoatrophy, the exact correlation between HIV medications and fat gain are still under research.

Again the best way to manage lipohypertrophy is through a low-fat diet and regular exercise. Research has shown that abdominal fat cells are particularly responsive to aerobic exercise. In addition, doctors recommend checking cholesterol and triglyceride levels regularly as well as insulin resistance. Some doctors have even tried Growth Hormone supplements for patients. Studies have shown that growth hormone can reduce fat accumulation in the abdomen and back of neck. This treatment has been controversial due to the many side effects and expense for the drug.

Conclusion

Lipodystrophy may not be the most dangerous side effect of HIV medications but it is one of the most feared. Body shape changes can affect how you look and feel about yourself, and in the case of lipohypertrophy, it can increase risks of diabetes and heart disease.

Much is still unknown about lipodystrophy. For those people taking HIV medications it is best to begin eating a healthy diet and participating in a regular exercise program even before changes in fat distribution. With the help of nutritionists and personal trainers, HIV positive people can maintain a healthy and more active life.



Domestic Water Conservation

By Gayle T. Casel, MPH Student, Walden University

Water is as necessary as the air we breathe and is the common element that links our ecosystems. People use water for drinking, cooking, bathing and gardening (EPA, 2006) and rely on water to grow food, generate power, cool industrial machines, transport wastes, and more. Since more than 97 percent of the Earth's water is saltwater, the amount of fresh water available for drinking, irrigation, and industrial use is limited (EPA, 2006; Moeller, 2005). Groundwater is the primary source of public and domestic water supplies. Accessible groundwater sources are limited in volume and, once depleted, are essentially irreplaceable (Moeller, 2005). Even though this has been an ongoing problem, farmers and municipalities throughout the world still continue to pump water out of the ground faster than it is being replenished.

The importance and use of tap water in the daily operations of businesses and residential developments is easily taken for granted. Water is the primary ingredient in most of the products we use every day such as toothpaste and perfume. Within the United States there are four industrial users that are responsible for the consumption of about 30 billion gallons of water per day. Those industries include the manufacturers of paper, refinement of petroleum products, and production of chemicals and primary metals (Moeller, 2005). Average Americans are also responsible for the use of large quantities of water inside and outside of their homes, with the average family of four using 400 gallons of water every day (EPA, 2006). In the average household (those without installed water-efficient fixtures), the greatest daily use of water can be attributed to toilet flushing, bathing and laundry cleaning.

The depletion of the nation's water supply has a significant impact on the environment. Water is responsible for maintaining the aquatic environment. If the flow of fresh water to estuaries is disrupted, the water quality and the health and distribution of plants and wildlife will be affected. Too little freshwater can adversely affect fish spawning, shellfish survival, bird nesting, seed propagation, and other seasonal activities of fish and wildlife (EPA, 2006). The excessive withdrawals of groundwater are also causing the land to subside. In some areas of Texas, the land has subsided as much as 1 to 2 meters; in Mexico City, some areas have sunk as much as 10 meters; and in Florida, some lands overlying aquifers have collapsed and saltwater from the ocean has replaced the fresh water supply (Moeller, 2005). These sinkholes create a dangerous area and limit the area available for construction.

With over 250 million people depending on fresh water for a multitude of uses, water should be recognized as a precious resource (EPA, 2006). Water is common property and should not be misused or wasted. The consequences of misuse will not only impact individuals, but will impact all consumers. There are many ways in which water use can be reduced in the household, and other methods are being researched to reduce water usage on a larger scale. The conservation of water is a very important environmental concern because many areas of North America face serious water shortages and consumers need to do their part, however small, to conserve the precious water supply (AWWA, 2006).

A simple way to save water in the home is to check for leaks from appliances, toilets, and faucets, as even the smallest drip can produce a 10 percent waste due to leaking (AWWA, 2006). When washing dishes by hand, two basins can be used (with one for washing and one for rinsing) to avoid continuously running water. Alternatively, dishwashers should be fully loaded before running for maximum use of water. There are also high-efficiency dishwashers available that use improved technology for the primary wash cycle and use less hot water to clean. Toilets in homes built before 1992 should be replaced with more recent water-efficient models. Although high-efficiency appliances are more expensive than the original model, research has shown that the energy and water savings achieved by these machines will payback the cost difference in 1 to 6 years (H₂Ouse, 2006).

In summary, water conservation has received heightened awareness in the past several years due to the increasing water shortage. Each individual must do their share to make one step towards using water more efficiently in the household. Businesses can also do their share by using reclaimed water to irrigate landscaping. There are several programs in place such as water restriction programs, water allocation

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Healthcare disparities among Culturally and Linguistically Diverse Immigrants in the U.S.

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One of the greatest challenges faced by the United States healthcare system is how to provide cost-efficient, culturally and linguistically competent healthcare services to racially and ethnically diverse populations. This challenge is due to several issues ranging from disparity of healthcare services among such populations, to language barriers, and to the dearth of bilingual and bicultural healthcare professionals who can provide these services. In response to these issues, degree programs and professionals are seeking ways to improve healthcare access and services. At this time, I will discuss the causes and suggested solutions to health disparities among racially and ethnically diverse immigrant communities.

Healthcare disparities among culturally and linguistically diverse immigrants exist for several reasons. First, accessible healthcare is sparsely available to such populations due to their inability to afford insurance with increasing operation costs for healthcare service providers. Second, those providers who serve these populations face the challenge of providing personnel that can communicate effectively with patients with limited English proficiency (LEP). Furthermore, the cultural competencies needed to work with patients' diverse beliefs and practices regarding treatment is another issue that arises between medical practitioners and patients. In response to these issues, professionals in public health and related fields are conducting more research investigations that examine barriers which impede access and appropriate services to patients from racially and ethnically diverse backgrounds. They are utilizing the results of population based assessments (e.g. patient surveys and telephone interviews) to modify the reported problems across various aspects of current healthcare practices.

How might the disparity of services to racially and ethnically diverse immigrants be addressed? Three areas must be reassessed to answer this question: (i) degree programs; (ii) current service professionals; and (iii) community-based healthcare sites (e.g. hospitals, community clinics). Beginning with universities and other institutions that train healthcare professionals at the state and national level, program curriculums should include research that addresses the availability and efficacy of existing services to these populations. Cross-cultural, comparative research that examines the ethnic and cultural beliefs regarding healthcare decisions among these patients is of equal importance. Research data could be obtained through national statistical offices and the United States census bureau towards the development of a community or household survey program designed to collect information about disability issues and access to healthcare services. In addition, the training of personnel in general fields such as social assistance, public health, medicine, education, and vocational rehabilitation can be executed through local or international mentor programs and continuing education teleconferences. I also recommend increased sociocultural and sociolinguistic content in undergraduate and graduate coursework, practicum, or residencies and more study abroad and international clinical externship options.

With respect to healthcare professionals, interdisciplinary collaboration among health, education, social, and labor sectors is needed to ensure that LEP patients receive equal access to all available healthcare services. Public health and other related fields must work together more at the community or local level than at the national level to effect long-term change. Thus, applied research activities are of great value in the development of new techniques for healthcare service delivery models, adult literacy programs, and the preparation of resource materials appropriate for different linguistic and cultural groups and the training of personnel under conditions relevant to each region (World Health Organization, 2003).

With respect to community based healthcare sites, the United Nations (UN) (2004) identifies several developmental efforts community-based sites can implement to bring about more accessible healthcare services. The UN calls for the establishment of social services, social security systems, cooperatives, and programs for mutual assistance at the national and community levels for underrepresented and minority populations. This establishment increases an awareness of the services each program offers and provides easier referrals for services that cannot be provided otherwise.

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Acute Diarrheal Diseases In Young Children: An Ongoing Public Health Problem

By Zeynep Angin Shorter

Diarrhea is one of the common and easily identifiable childhood diseases. In almost every culture, everyday knowledge of illness and disease has a way of identifying it. For example, mothers all over the Middle East call it “*ishal*”, and in India, it is called “*dast*”. Mothers usually know that their child has diarrhea when the stools have a strong smell or pass noisily as well as being loose and watery.

Unfortunately, despite its quick diagnosis by caregivers and health professionals, every year diarrhea kills one among every 200 children who contract it worldwide (UNICEF, *Facts for Life*). In 2002, deaths from diarrhea constituted 15% of all mortality in children under five (WHO and UNICEF Joint Statement, 2004). According to UNICEF, about 4 billion cases of diarrhea per year cause 1.8 million deaths worldwide, with 90% of deaths (1.6 million) among children under the age of five. In India alone, 600,000 children die every year because of the disease (USAID India). Regionally, South East Asia has the highest childhood mortality rates due to diarrhea.

If not treated, diarrhea leads to death in a short period. It kills through dehydration, i.e., loss of water and electrolytes. The more diarrhea stools a person passes, the more water and salts he or she loses. Dehydration can be made worse by vomiting, which often accompanies diarrhea. Infants and children are more vulnerable to diarrheal mortality, since they are more vulnerable to dehydration due to their smaller body size. Even when treated, repeated episodes of diarrhea make children more exposed to other diseases and malnutrition.

Certain food handling, preparation, and storage practices (such as storing cooked foods at room temperature for more than 3-4 hours) increase the risk of fecal contamination (Huttly et al. 1997). Present research shows that clean water and sanitation reduce diarrhea specific mortality by 65% (Huttly et al 1997). There are some other studies that also suggest that improvements in water quantity and in excreta disposal may be more significant than water quality alone (Esrey et al. 1985). Water quantity is thought to encourage better personal and domestic hygiene. Presently, there is more focus on personal hygienic behavior as a preventive strategy (e.g., by WHO) than the improvement of the water quality infrastructure; in fact the latter may be necessary to encourage the former.

If diarrhea is a disease that we know how to prevent and cure through rehydration, why do we put four billion children worldwide under the risk of diarrheal diseases every year? What are the reasons which make prevention and case management less effective? First of all, diarrhea is not like polio or small pox with one single agent causing the disease. Several microorganisms might cause diarrheal symptoms. So a magic vaccine that prevents it in all children irrespective of their social, economic, and cultural environments is not yet available.

Second of all, the current public health programs against diarrhea lack the understanding of social, political, economic and cultural factors at work. From a cultural perspective, promotion of certain behavioral changes such as washing hands or boiling water to prevent diarrhea cannot successfully be done unless the promoters of these practices understand the physical and cultural environments in which families are situated. For example, my own observations among urban low-income women in Turkey where diarrheal diseases are common showed that it is considered a disease due to exposure of the lower extremities or stomach to cold. In the Turkish case, parents act to keep their children warm by putting extra clothing on them or in some cases by not washing them as frequently, and may also prevent children’s intake of cold foods. One of the common practices is to keep refrigerated food in room temperature until it becomes lukewarm before feeding, which actually exposes the food to disease causing bacteria. Thus, any successful health message should engage in and articulate local ways of understanding disease for effective communication. For that reason, health promotion campaigns usually fail if they do not have an idea of how diarrhea is locally managed and prevented by the families.

We should also realize that behavioral change for diarrhea prevention cannot be achieved or sustained without the right infrastructure for clean water, sanitation, and proper housing. Families need amenities and economic means at their disposal for improvements in hygiene and nutrition. Without the supply of these basic services and entitlements, children are always at risk of contracting gastrointestinal diseases.

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Blue is for Boys and Pink is for Girls By Christina Bitar



Gender roles

The moment the baby is born; biological traits are linked to gender stereotypes. Social expectations define gender roles and determine how a person ought to act, think, feel and perceive life¹. For most men, gender roles lead to autonomy, independence and power; for most women, they lead to reliance, subordination^{2, 3} and loss of power. Men are brought up to be risk takers and are encouraged to have aggressive behaviour as a definition of manhood, whereas women are supposed to limit their aspirations and restrict themselves to mother and wife roles⁴. Sadly in many parts of the world, social constructions limit women's power over their own health and life^{2, 3, 5, 6}; women are believed to be subordinate to men, and are supposed to respond to men's needs and desires.

Gender and violence

Cultural designations of manhood and masculinity contribute to violence⁵: a major public health^{7, 8} and human rights⁹ problem that threatens lives of women in all cultures, religions, and socio-economic backgrounds¹⁰. Gender-based violence includes physical, sexual, and emotional abuse, and it is mostly carried out by intimate partners⁷. Men use violence to assert their control and authority over their partner^{5, 11}; this seems to be the definition of "being a man" in many cultures¹². Sadly being a woman is the most important risk for becoming a victim of violence⁵. Domestic violence is socially accepted¹³, supported by a society of permissiveness⁵, and maintained by a culture of silence¹⁴ and denial of the gravity of health consequences of abuse¹³.

Violence during pregnancy

Violence is mentioned as a pregnancy complication more often than diabetes and hypertension¹⁵. Contrary to common beliefs violence is intensified^{16, 17}, even doubled during pregnancy¹⁸ and could be triggered by it¹⁹. Most violence against women is carried out by their husbands or partners⁵. Pregnancy is a time where abuse can start as shown by WHO study, in which 13 to 50% of women were beaten for the first time when they were expecting⁷. Moreover, most abuse begins before⁷ and the severity of violence may well increase during pregnancy⁸, leading partners to kick and hit women's bellies and genitals¹³.

Studies have identified past history of abuse, social instability, and psychological problems as predictors of abuse during pregnancy¹⁷. Other studies have identified jealousy as a main factor; the partner, who feels the baby is replacing him²¹, refuses the woman to share her love, which triggers the anger of a controlling man and leads to violence¹⁰. Could violence also be explained by a transfer of power during pregnancy? Who has power over the baby? The woman, who was submissive to her partner before pregnancy, suddenly gains power over a baby, which could be perceived by the man as a threat. Although psychological theories confirm this as a fact, scientific evidence remains hard to gather since indicators are challenging to identify, therefore more efforts should be directed towards founding this interpretation.

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The World Bank has estimated that domestic violence accounts for five to 16% of healthy years life lost to death and disability (DALYs) ⁶. Studies have proven that women face fatal outcomes in response to abuse during pregnancy such as fetal loss²², haemorrhages, miscarriages⁷, death¹⁵, and psychological disorders leading to depression and suicide²³.

Implications on reproductive health

Cultural norms and gender roles have great impact on women's health. Gender inequities limits women's access to health resources and most of the time bound their control over their own sexual reproductive health; thus women are subject to exploitation, abuse, unwanted pregnancies, and sexually transmitted diseases⁶.

They don't have the power to negotiate safe sex, and they don't have a say in family planning choices. Reproductive health programs are increasingly aware of these

social inequities and efforts should be made to address this challenge within the services provided.

Health care organizations are hardly able to solve gender power inequities, however adopting a gender sensitive approach to programs can improve services provided and women's lives.

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Source: Refuge 2004 ²⁴

MEDICARE PART D UPDATE—PRESCRIPTIONS FOR THE POOR; INCREASED COSTS FOR THE MIDDLE CLASS

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According to the U.S. Department of Health & Human Services, the new prescription drug program (initiated January 1, 2006), entitled Medicare Part D, makes it easier for recipients to obtain medications needed to maintain optimum health^{1, 2}. Based on the new plan, Medicare recipients, seniors and the disabled, found a new landscape in the health insurance environment. As a result of the modernization of Medicare drug policy, many patients may have increased difficulty obtaining their medications, and subsequently, many of those individuals will not adhere to their treatment regimens³. This can be due primarily to cost, but it also involves other factors including education, socio-economic status, and one's level of incapacitation due to age, illness, or disability.

Medicare recipients with limited resources may be eligible for the low-income subsidy program of the Social Security Administration to help defray the costs of Medicare Part D prescription coverage^{4, 5}. However, many low-income patients, although eligible for the subsidy, will fail to apply for it³. The subsidy program eliminates deductibles, lowers co-payments, and decreases or eliminates other out-of-pocket expenses⁴. The poorest beneficiaries will lose Medicaid and will automatically be enrolled in a Medicare Part D plan to obtain prescription coverage⁷. This group is particularly vulnerable to inconsistencies in coverage due to debilitating mental or physical disabilities. Many reside in long-term care facilities such as hospices or hospitals, thus leaving family members, agents, and attorneys to deal with the choices provided by the new program.

However, middle-income patients and those with supplanted employee-based coverage will generally have higher out-of-pocket expenses for their prescription regimens^{1, 4}. This is due to higher premiums, higher deductibles, coverage caps, major coverage gaps (called doughnut holes), and co-payments for Medicare Part D beneficiaries⁶.

Medicare D increases the paperwork and other forms of bureaucratic red tape in a system already mired in legalities⁸. Considering the effects of this program upon the lowest income groups, consigning more bureaucracy to the most cognitively impaired, friable, and illiterate group of insured patients will likely result in confusion and subsequent interference with prescription drug treatment regimens. The following are some results of the implementation of the Medicare Part D program that may raise concerns:

1. Cost-containment mechanisms such as prior authorizations and therapeutic substitutions of drugs with the same effect will become more common⁹ (e.g., the substitution of the cheaper drug Protonix for the more expensive Nexium—two chemically different drugs each with its own set of side effects). In addition, pharmacies may use formularies that result in the dispensing of drugs based on profit margins⁹.
2. Doctors may prescribe fewer prescription drugs and more over-the-counter drugs.
3. There will be an increased practice of “reverse medicine” by doctors prescribing drugs requested by patients on the basis of direct advertising alone (e.g., “Doctor, please give me a prescription for the *Purple Pill* that I saw on TV.”) Direct-to-consumer advertising is a risky, unsafe practice with unpredictable clinical implications—doctors may make rushed, impulsive prescribing decisions based on patients' requests alone.
4. Medicare D means less regulation and a major transfer of responsibility for the Nation's health from the government to big business. The large drug companies (e.g., Merck, Bayer, Purdue-Pharma) are among the most financially secure international corporations. Medicare Part D is a financial windfall for the insurance industry and for the pharmaceutical companies.
5. There will be increased distribution of “knock-off” and unregulated drugs, coupled with increased underground and Internet sales of drugs of questionable quality, potency, and safety. 6) Gaps in coverage and the subsequent high out-of-pocket expenses for drugs in Medicare D for the middle and upper classes may lead to an individual's decreased use of medications. These effects are magnified in patients with chronic illnesses⁶. For example, patients with high blood pressure, cardiovascular disease, or diabetes (chronic diseases often termed “silent killers”) may decrease or discontinue medication usage and be dangerously asymptomatic for extended periods during these gaps in their insurance coverage.

Hailed by politicians as long-awaited help for seniors with the cost of prescription drugs, the legislation creating Medicare Part D will primarily help those below the poverty level and others with

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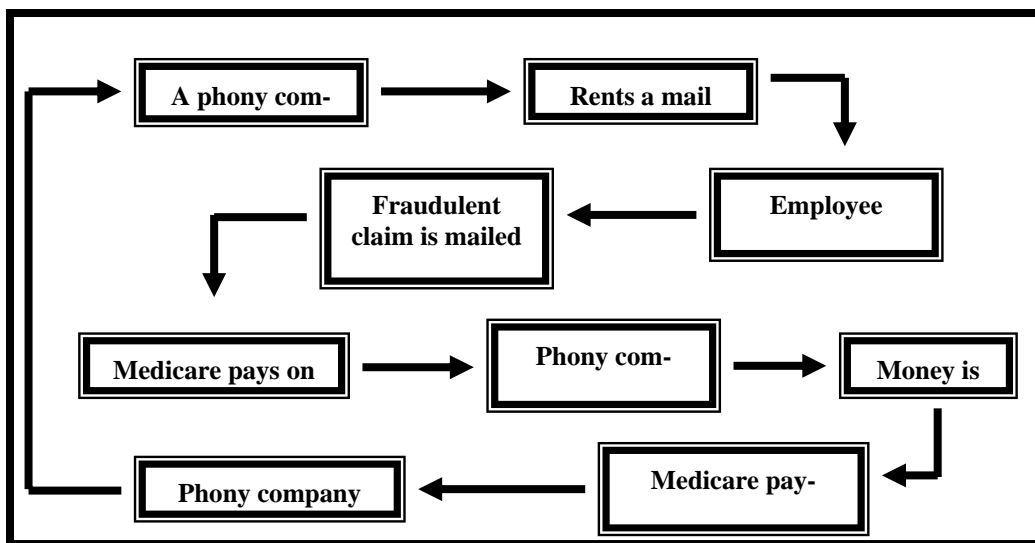
AN HISTORICAL REVIEW OF MEDICARE FRAUD AND ABUSE IN THE UNITED STATES

By Carlos Martinez

In an effort to understand the root causes of Medicare and Medicaid fraud and abuse, an investigational analysis of data from January 1, 2000, through April 30, 2005, was conducted to assess the effects of lost revenues on the healthcare industry via fraud data available from government documents. The Balanced Budget Act of 1997 and the Health Insurance Portability and Accountability Act (HIPAA) in 1998 strengthened efforts to monitor and prevent fraud, waste and abuse in the Medicare and Medicare programs. At the highest level, the United States General Accounting Office (GAO) has reported that over \$1.7 billion in judgments, settlements, and administrative impositions in health care fraud cases and proceedings have been recovered (CENTERS FOR MEDICARE AND MEDICAID SERVICES, 2000, p. 1). To taxpayers this means higher costs, and to persons on Medicare it may frequently mean both financial hardship and loss of necessary services. Medicare fraud and abuse continues to increase in the United States (U.S.) that “between 1997 and 2003 more than \$38.5 billion or 11% of Medicare payments” (U.S. Office of Deputy Attorney General, 2004, p. 2) were overpaid to health care providers. Some of the fraudulent activities include: double-billing schemes, physician kickbacks, hospitals billing for unnecessary or unperformed tests, and the quality of care provided to patients. Besides the financial losses, in some instances these improper activities endanger patient safety.

Unfortunately, investigational schemes have not been decisively enforced in the country. Numerous academic scholars have written and conducted research on Medicare fraud method analysis and have found that “health care providers are committing Medicare fraud and abuse” (OFFICE OF INSPECTOR GENERAL, 2004, p. 4). Thompson, a writer for the Senior Medicare Patrols Organization, which volunteers for The General Accounting Office said, that “ estimates of billions of Medicare dollars are lost each year to waste, fraud and abuse” (Thompson, 2000, p. 3). The OIG fraud unit, recovery between Medicare and Medicaid seems to be associated with the fact that 39 states have not adopted a local version of the Federal False Claims Act (FFCA), which gives prosecutors broad power to combat fraud, and protects whistleblowers who report Medicare and Medicaid fraud. Although the government has recovered more than “\$1.7 billion in judgments, settlements, and administrative impositions in health care fraud cases and proceedings, the fraud continues to increase every year. The purpose of DHHS’s activities was to collect more than “\$1.3 billion. More than \$1 billion of the funds collected and disbursed in 2001 were returned to the Medicare Trust Fund” (DEPARTMENT OF HEALTH AND HUMAN SERVICES AND DEPARTMENT OF JUSTICE, 2001, p. 2). According to the DHHS-DJ study, a total of 465 defendants were convicted for health care fraud-related crimes in 2001. There were also 1,746 civil matters pending, and 188 civil cases filed in 2001. The DHHS-DJ excluded 3,756 individuals and entities from participating in the Medicare and Medicaid programs, or other federally sponsored health care programs, mostly due to convictions for Medicare fraud crimes (DHHS-DJ, 2001). Please see the **Figure 1** to understand Medicare fraud.

Figure 1 Third Party Billing



1. Centers for Medicare and Medicaid Services (2004). *New guidelines for CMS, 2-3* Retrieved on May 10, 2005 from <http://www.cms.gov>

2. Department of Health and Human Services & Department of Justice (2001). *Health care fraud and abuse control program annual report, 1-2*. Retrieved online June 7, 2005

3. Department of Health and Human Services & Department of Justice (2001). *Health care fraud and abuse control program annual report, 1-2*. Retrieved online June 7, 2005. From <http://www.usdoj.gov/dag/pubdoc>.

4. U. S. Office of Deputy Attorney General (2004). *Medicare Fraud and Abuse in the U.S., 2-3* Retrieved on May 10, 2005 from <http://www.dag.gov>

Establishing a Student Collaboration: The Philadelphia Public Health Student Council

*By Andrea Rosso, MPH candidate, Drexel University School of Public Health and
Eric Griffin, MPH candidate, University of Pennsylvania Graduate Program in Public Health Studies*

As with many major cities across the country, Philadelphia faces numerous public health problems and at the same time is a training ground for future public health and healthcare professionals. Many public health initiatives in the area provide students with real life experience in the field. Recently the Breath Free Philadelphia campaign, which successfully advocated for passing smoking ban legislation in City Council, reached its peak during this year's National Public Health Week (NPHW). In an attempt to realize a city wide NPHW event in support of this legislation, public health students from across the city met to unify their message. Though a cohesive message was developed, a single collaborative event did not occur. A better organized collaboration between students of different public health programs would be necessary to fully realize this vision.

Public health is a collaborative field, yet as highlighted by last year's NPHW efforts, there has been little opportunity for Philadelphia students at different institutions to interact, to advocate locally for health, and to share experiences and resources. A student-led effort has resulted in the recent formation of the Philadelphia Public Health Student Council (PPHSC), which currently has representatives from the University of Pennsylvania, Drexel University, Cheyney University, and Temple University.

PPHSC: The What and How?

After NPHW, several meetings of student representatives followed that gave structure to the PPHSC. An assessment of the goals, needs and resources of the collaboration informed the development of the council's bylaws which would govern its activities. In particular, the bylaw discussion focused on maintaining equal representation from each member school. Two decisions were made to address this need. The first decision was that every student body of a member school would be granted two seats on the council with equal voting rights. The second was that the Council could not be directly affiliated or supported by any particular academic institution more than another. Therefore, the PPHSC would be integrated within the Philadelphia Partners in Public Health (PPPH), a collaboration among professional public health entities in the Philadelphia area.

As an introduction to PPHSC, academic institutions with public health programs were sent a letter and the council bylaws along with a request for comments on a draft Memorandum of Understanding that outlined expectations for both parties involved. Feedback has been used to help refine and strengthen our relationship to academic public health programs. Although PPHSC is an entirely student-led collaboration, the support of the administration at these institutions is seen as a key to maintaining continuity in the council.

Council members have chosen a number of goals that drive the development of PPHSC. They include promoting greater collaboration among students and their institutions to address public health issues in and around Philadelphia. PPHSC will assist in the development of public health interests among students through networking and speaker events. In addition, the promotion of advocacy activities and advising member student organizations are seen as important goals of the Council. Finally, PPHSC aims to be a conduit for coordinated activities among its members in support of National Public Health Week.

The Future of PPHSC

As it grows, PPHSC is seeking to establish itself as an important and effective means for student organization and partnership in Philadelphia. Part of this growth will involve the integration of other student groups from all of the public health academic programs in the city (seven in total). In the immediate future, PPHSC is planning a kick-off event to enhance academic networking and association between both students and faculty from all the area public health academic programs. The event, to take place on October 12th, has asked a few speakers to address this year's theme, *Public Health in Philadelphia: Its Past, Present, and Future*. The event will showcase local public health efforts as well as provide an opportunity for students to learn about the most pressing public health issues in the area. PPHSC hopes to make this an annual event to greet returning students and welcome new ones. Similar plans will be organized to end the academic year with an event to celebrate and send off graduating students.

If you would like additional information on the PPHSC, establishing your own student council, or the upcoming event, *Philadelphia Public Health: Its Past, Present and Future*, please contact PPHSC at PhilaPHSC@gmail.com.

How is Complementary and Alternative Health a Part of Public Health?

Julia Eminger, CHES, ACHP SPIG Student Liaison, MPH Candidate, Indiana University

Complementary and alternative medicine (CAM) is defined as “a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine.” The National Center for Complementary and Alternative Medicine is the Federal Government’s lead agency for scientific research on CAM and is a part of the National Institutes for Health (NIH). This agency focuses on five major areas of CAM—Alternative Medicine Systems (ex. naturopathic medicine), Mind-body Medicine (ex. meditation, prayer, art therapy), Biologically Based Therapies (ex. herbs and vitamins), Manipulative and Body-Based Methods (ex. massage and chiropractic), and Energy Therapies (ex. qi gong). Complementary medicine is used in conjunction with traditional medical practices and alternative medicine is used instead of conventional medicine.¹



NCCAM groups CAM practices into four domains, recognizing there can be some overlap. In addition, NCCAM studies CAM whole medical systems, which cut across all domains.

In the 2002 National Health Interview Survey (NHIS), 36% of Americans used some type of CAM, and 62% of Americans used a type of CAM when prayer and vitamin therapy for health reasons were included. The top ten CAM therapies used were prayer for self, prayer for others, natural products, deep breathing, prayer group, meditation, chiropractic, yoga, massage, and diets. Several health conditions were cited as prompting CAM use, including pain (back & neck), depression, anxiety, insomnia, and headache.

CAM is a part of the public health field as it encompasses a set of behaviors and practices that aim to reduce one’s morbidity and mortality, and increase one’s quality of life. With the growing interest and need for complementary and alternative health practices, a group APHA members formed the Alternative and Complementary Health Practices (ACHP) Special Interest Group (SPIG). This group of public health professionals and students “works toward the scientific evaluation of methods to promote and restore health that are not available from conventional medicine, and disseminates knowledge of validated practices and their potential contributions to health care.” Any APHA professional or student member can elect to have the ACHP SPIG as their primary or secondary section affiliation.

I became interested in the ACHP SPIG through my personal research interests in holistic health, particularly the interaction of individuals’ mental, emotional, and spiritual health on their quality of life. Thus, I was drawn to the mind-body aspects of CAM. Also, after a car accident, I found relief and healing through the manipulative and body-based method of chiropractic, and I have found stress relief through yoga and meditation. Through these and several other positive experiences with CAM, I developed a passion for helping individuals, groups, and communities enhance their quality of life through a balance of CAM and conventional public health practices.

During the 2006 APHA Annual Meeting, conference attendees can be a part of several exciting scientific sessions that focus on CAM, along with the ACHP SPIG business meeting. There are also specific student opportunities within the ACHP SPIG, including being the Student Section Liaison or a member of the new developing student committee. For more information on the ACHP SPIG activities at the conference, please visit <http://apha.confex.com/apha/134am/techprogram/>. If you are student who is interested in learning more about CAM, the ACHP SPIG, or how to become involved, please feel free to contact me jeminger@indiana.edu.

1. National Center for Alternative and Complementary Medicine. (2002). What is complementary and alternative medicine (CAM)? Retrieved August 24, 2006 from <http://nccam.nih.gov/health/whatisacam/pdf/whatisacam.pdf>

2. National Center for Alternative and Complementary Medicine. (2004). The use of complementary and alternative medicine in the United States. Retrieved August 24, 2006 from <http://nccam.nih.gov/news/camsurvey1014.pdf>.

Go Force: Education, Go Get It.

By Zeida G. Rojas, MPH, UNT-HSC School of Public Health

Go Force (G-Force) is a grassroots network of community-managed college recruiting and mentoring centers located in communities across the state of Texas. One G-Force chapter can be found at the University of North Texas Health Science Center (UNT-HSC) serving two area high schools, North Side High School and Dunbar High School. Both schools are HB400 schools, which means that they rank among the lowest in college-going rates.

G-Force members at UNT-HSC include students from the Graduate School of Biomedical Sciences, the School of Public Health and the Texas College of Osteopathic Medicine. Members spend approximately 1-3 hrs/month or more mentoring students at the Go Centers located in the high schools about the benefits of a college education. In addition, G-Force members work with students to identify specific barriers and address them in a manner that will help students and their families clear the hurdles.

Childhood Obesity

Elizabeth Richards, RN, IUPUI

Childhood obesity is becoming increasingly prevalent in today's society and statistics are climbing at an alarming rate. According to the 1999-2002 National Health and Nutrition Examination Survey (NHANES), an estimated 16 percent of children and adolescents ages 6-19 are overweight, representing a 45 percent increase from NHANES III (1988-94) estimates (Centers for Disease Control). Dr. Richard Carmona, the U.S. Surgeon General, indicated in testimony meetings that more than 9 million U.S. children, or approximately one in every seven children, are overweight (US DHHS, 2004). Childhood obesity is also a major health concern internationally. Deckelbaum, R. & Williams, C. (2001) state:

Overweight and obesity in children is epidemic in North America and internationally. Approximately 22 million children under 5 years of age are overweight across the world. In the United States, the number of overweight children and adolescents has doubled in the last two to three decades, and similar doubling rates are being observed worldwide, including in developing countries and regions where an increase in Westernization of behavioral and dietary lifestyles is evident. (p. S239)

In addition to its impact on health, childhood obesity is also a very costly health problem. The American Academy of Family Physicians reveals that annual hospital costs related to childhood and adolescent obesity rose \$92 million in eighteen years, from \$35 million to \$127 million in 1999 (AAFP, 2005).

There are numerous factors that contribute to this important health issue. One important environment for children is the school setting. Unfortunately, as children get older, the level of physical education requirement in school decreases. High school students, for example, typically only need two semesters of physical education in total (CDC, 2000). The 1999 Youth Risk Behavior Surveillance System (YRBSS), a national survey conducted by the CDC, found that almost 80% of high school students surveyed did not attend physical education class daily (MMWR, 2000). However, lack of physical activity in today's school system is just one contributor to childhood obesity. In addition, children in school have easy access to non-nutritious food items. According to the Center for Science in the Public Interest (CSPI) "75 percent of drink and 85 percent of food options in school vending machines were of poor nutritional quality" (CSPI, 2004). Research results of this organization also show that "74% of middle/junior high schools and 98% of senior high schools have vending machines, school stores, or snack bars" (CSPI, 2004). Most school children are allowed to access these food avenues during their lunch periods. The 1999 YRBSS reported that approximately 76% of surveyed high school students did not eat the USDA recommended intake of at least five servings of fruits and vegetables per day (MMWR, 2000).

A child's environment at home can also provide many contributing factors to childhood obesity. For example, the amount of time children spend in front of a television, computer, or video game has drastically increased and use of these media expose children to advertisements for candy, fast food, snacks, and soda. In addition, the time children have for outside physical activity decreases as the amount of time watching television and using other media increases. According to Andersen et al (1998), one-third of American children watch four or more hours of television per day and two-thirds watch at least two hours per day. Children who viewed four or more hours of television each day had higher BMIs than those who watched two or less hours a day. Another important issue in the home is that of parental role modeling. If parents are not knowledgeable about recommended dietary guidelines and do not follow these guidelines, children can not be expected to either.

Finally, community's environment also factors into childhood obesity. Children need a safe and available area for physical activity. Walking to school or playing after school can increase a child's activity level. However, many communities either do not have sidewalks that children can use to walk to school or have high levels of crime which makes it unsafe for children to walk or ride their bike to school. This is supported by Baker et al (2005) whose research showed that children living in high-crime neighborhoods appeared to spend less time outdoors because of safety concerns.

Overall, the problem of childhood obesity has become an epidemic. Healthy People 2010 has two objectives

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Stopping the Spread of Cancer: Researchers track high rates of breast and cervical cancer among Hispanic women on U.S.-Mexico border

By Bob Nosbisch

Hispanic women on the U.S.-Mexico border are three times more likely to die of cervical cancer and also more likely to die of breast cancer than women who live elsewhere.

The husband and wife team of John Moraros and Yelena Bird, each with medical and master's degrees, works in New Mexico State University's Department of Health Science, tracking those cancers supported by \$75,000 grants from the Paso del Norte Health Foundation.

When women are not regularly screened, disease is not diagnosed until it has reached an advanced stage. The treatment options have limited effectiveness at this time.

The cause of cervical cancer is generally acknowledged to be sexually transmitted infection with the human papilloma virus (HPV). While HPV does not always lead to cervical cancer, 10 percent of the women on the border get abnormal Pap smears and of this number, another 10 percent have HPV that can potentially lead to cancer.

The mortality rate of cervical cancer is substantially higher in Mexico than in the U.S., Moraros said. However, the border rates surpass the rates of either country's interior. Moraros attributed this to the discomfort of pelvic exams, language barriers and financial problems that prevent many Latinas from regularly visiting their gynecologists.

Moraros analyzes HPV DNA to identify current infections and determine the types of HPV most prevalent in southern New Mexico and the northern Chihuahua border area. He also determines the HPV viral load and uses serum antibodies to characterize HPV infections. By using Pap smears and coloscopies, the correlation between the presence of HPV DNA and the severity of cervical cancer can be determined.

Cervical cancer can be prevented by using relatively inexpensive screening and treatment technologies.

Moraros added that young women must practice safe sex and use protection, preferably condoms, because birth control pills, tubal ligations and vasectomies do not protect against sexually transmitted diseases.

Meanwhile, Yelena Bird studies samples of breast tissue from women with hereditary breast cancer on the U.S.-Mexico border. Molecular biological markers of gene expression are used to determine a woman's overall risk of developing the disease when breast cancer runs in the woman's family. These methods are chosen because they are more efficient at detecting abnormal breast cells than mammography or examination of cells or tissue under a microscope.

One of every eight women in the U.S. will get breast cancer. The rates on the border have become even higher, where it is estimated that one of every five Latinas will get the disease. A woman with sporadic cancer may be the only one in her family with the disease while the more aggressive familial breast cancer may run in the family.

Mammography is currently the best available approach for early detection, Bird said. However, the optimal screening regimen in high-risk women, such as the ones who have had a first-degree relative such as mother, sister or aunt diagnosed with breast cancer, is not yet known. Therefore, the need to develop molecular screening methods to augment mammography for the early detection of breast tumors, particularly in high-risk women, is critical.

A woman's chances of getting breast cancer increase if she is obese, since estrogen lodges in the breast's fatty tissue, especially in a post-menopausal woman. A woman who never had children and therefore has higher levels of estrogen is also at risk. Women who start their menstrual cycles before they are 12 years old or who have their menopause after the age of 55 also have a greater chance of getting the disease. Also, smoking and alcohol usage increase the risks of breast cancer.



Yelena Bird, right, and John Moraros work side by side in a biochemistry laboratory. The husband and wife team are both medical doctors, and each is working toward a PhD in biochemistry.

Photo by Darren Phillips

Continued from page 18—Domestic water conservation

programs, and rebate programs to aid in conservation efforts. Not only will water conservation lead to monetary savings, it will also work to protect our environment. Always use water wisely and efficiently. There is an abundance of educational resources available (some are included in the reference section) to provide examples of different methods on conserving water. Please take the time to research these and you will be well on your way to making the environment a better place to live!

References

American Water Works Association (2006). Water Conservation Around the Home. Retrieved 6/30/2006 from <http://www.drinktap.org/consumerdnn/>.

H2ouse Water Saver. Save Water, Money, Energy Now! Top 5 Actions (2006). Retrieved 6/30/2006 from <http://www.h2ouse.org/action/top5.cfm>

Moeller D. (2005) Environmental Health, 3rd edition. Copyright 2005 by Harvard University Press, Cambridge, MA.

U.S. Environmental Protection Agency (2006) Overview of the National Water Program. Retrieved 6/30/3006 from <http://www.epa.gov/water/programs/owintro.html>

Continued form page 19—Healthcare disparities

Public health professionals cannot know all language and cultures. However, professionals should be flexible in one's own intercultural and linguistic interactions. As with any other scientifically oriented profession, linguistic and cultural competence must be embodied by the healthcare professional to promote appropriate healthcare outcomes among culturally and linguistically diverse immigrants. All in all, collaboration between policy makers, insurance companies, and healthcare service providers will increase the likelihood that America's healthcare system can be better positioned to effectively address the needs of those who reside within this country.

References:

CBR/ILO/UNESCO/WHO Joint Position Paper: A Strategy for Rehabilitation, Equalization of Opportunities, Poverty Reduction and Social Inclusion of People with Disabilities (2003). Retrieved July 4, 2003 from: <http://www.ilo.org/public/english/employment/skills/download/jointpaper.pdf>.

Prevention and Disability. (2004). Retrieved July 4, 2003 from: <http://www.un.org/esa/socdev/enable/diswpa04.htm> top

Continued from page 22— Medicare Part D update

limited resources. In addition, poverty level patients will find increased stability and versatility under Medicare D (stable prices and the ability to use practically any nearby pharmacy—lowering transportation and time costs). Poverty level patients with the additional Social Security subsidy have no deductible and no gaps or holes in their coverage. They receive significant savings from the Medicare Part D program but only after dealing with a bureaucratic nightmare to sign up, followed by even more red tape to commence coverage.

Under Medicare Part D, middle and upper class beneficiaries, and those with substantial resources, will pay significantly more for their medications. Most seniors will face significant deductibles, coverage caps and holes, and lots of associated bureaucracy in the Medicare Part D program. Medicare D, as implemented, represents a precarious situation for the middle class but when the flood of choices is surmounted¹⁰, a stabilizing factor and economic boon for the poor.

¹Centers for Medicare & Medicaid Services (2005). *Medicare & You*. Publication No. CMS-10050-28. Baltimore MD: U.S. Department of Health and Human Services.

²Larkin, H. (2004). Justice Implications of a Proposed Medicare Prescription Drug Policy. *Social Work* 49(3): pp. 406-416.

³Havrda D., Omundsen B., Bender W. & Kirkpatrick, M. (2005). Impact of the Medicare Modernization Act on low-income persons. *Annals of Internal Medicine* 143(8): pp. 600-608.

⁴American Academy of Family Physicians (2006). R.Graham Center One-Pager: Medicare Part D, Who Wins, Who Loses? *American Family Physician* 73(3): Online journal retrieved from the World Wide Web on 02/25/06: <http://www.aafp.org/afp/20060201/graham1.html>

⁵National Senior Citizens Law Center (2000). Health Issues. Medicare Part D—The New Prescription Drug Bill: How Medicare Part D Affects Low-Income Seniors and People with Disabilities. Retrieved from the World Wide Web on 02/25/06: http://www.nslc.org/issues_health_medicareD_fund.html

⁶Stuart B., Simoni-Wastila L. & Chauncey D. (2005). Assessing the Impact of Coverage Gaps in the Medicare Part D Drug Benefit. *Health Affairs* (Millwood) Supplemental Web Exclusive: W5-167-W5-179.

When families are poor and deprived of basic needs, their access to quality health care for case management is also diminished, since in many parts of the world, such services require families to pay—in whole or in part. Physical inaccessibility to closest clinical services due to lack of roads and transportation is an additional issue faced especially by rural people. When quality health services are not easily accessible, traditional healers become the most accessible alternative for mothers and families to seek health care for their children.

A successful child survival program needs structural change as well as behavioral change so that families can properly feed, clothe, and educate themselves about the necessities of healthy living and have the means to seek medical help when they need it. Current research findings about social determinants of infant and child mortality show that increasing education of mothers and family income could bring enormous improvements in terms of bridging the gap between the health programs and the communities (Basu and Stephenson 2005). However, this stops short of the essential point: community development of infrastructure is perhaps the most promising contributor to better individual health practices.

References

- UNICEF, *Facts for Life*, www.unicef.org/search.php?q=diarrhoea&Go.x=&Go.y=8
- WHO/UNICEF Joint Statement (2004) *Clinical Management of Acute Diarrhea*. <http://www.rehydrate.org/diarrhoea/acute-diarrhoea.htm>
- Basu, M. A. and R. Stephenson (2005) “Low Levels of Maternal Education and the Proximate Determinants of Childhood Mortality: A Little Learning is not a Dangerous Thing” *Social Science and Medicine*, 60 (1): 2011-2023.
- Esrey, S.A., R.G. Feachem, J.M. Hughes (1985) “Interventions for the control of Diarrhoeal Diseases among Young Children: Improving Water Supplies and Excreta Disposal Facilities” *Bulletin of World Health Organization*, 63: 757-772.
- Huttly, S.R.A., S.S. Morris and V. Posani (1997) “Prevention of Diarrhoea in Young Children in Developing Countries” *Bulletin of the World Health Organization* 75 (2): 163-174.
- USAID (April 16, 2002) USAID and ICICI Launch US \$ 1 Million Campaign to Prevent Childhood Diarrhoea Deaths: Press Release, www.usaid.gov/in/MediaCenter/Press-April16.htm

Addressing violence

To end violence in general and during pregnancy in particular, we need to address the social mechanisms and gender roles that are fuelling this process^{5, 14}; UNFPA recognizes the need to engage men in this course. Policies and health programs ought to challenge the economical, political and social gender inequities to better respond and significantly reduce violence against women⁶. In many places in the world, women are still fighting to gain their right to vote, to access legal information, and to receive health services. Gender-based violence laws are still not addressed properly and fully, and authorities are still failing to reform unjust laws. Although status of women has gained considerable weight in the past decade, major obstacles remain to be surmounted³.

References

- The international journal of Transgenderism, *Perspectives used to examine gender*, [online], No Date, available from: http://www.humboldt.edu/~mpw1/gender_theory/perspectives4.shtml [Accessed 24 May 2006]
- UNFPA, *International Conference on Population and Development*, [online], Cairo 1994, available from: www.unfpa.org/icpd/icpd.htm, [Accessed 23 May 2006]
- United Nations, *The Fourth World Conference on Women*, [online] Beijing 1995, available from: www.un.org/womenwatch/daw/beijing/platform, [Accessed 21 May 2006]
- UNEP, UNESCO, *Overcoming Gender Inequities* [online], 2004, available from: <http://www.youthxchange.net/main/unfpa.asp>, [Accessed 22 May 2004]
- Walker L, *Psychology and Domestic Violence Around the World*, American Psychological Association 1999
- Reproductive health outlook, *Gender and Sexual Health*, [online] PATH 2004, available from: http://www.rho.org/files/RHO_gsh_12-19-04.pdf, [Accessed 22, May 2006]
- Watts Ch, Heise L, Ellsberg M, Jansen H, Garcia-Moreno C, *WHO Multi-country Study on Women's Health and Domestic Violence against Women*, WHO 2005
- Asling-Monemi K, Pena R, Ellsberg C, Persson L, *Violence against women increases the risk of infant and child mortality: a case-referent study in Nicaragua*, WHO 2003, 81 (1)
- United Nations, *Declaration on the elimination of violence against women*. New York, NY, United Nations, 1993 (United Nations General Assembly resolution, document A/RES/48/104)
- Corry B, *Domestic Violence and Your Unborn Baby*, [online], 1999, available from: <http://members.aol.com/SueMKent/baby.html>, [Accessed 23 May 2006]
- Kronbauer JF, Meneghel N, *Profile of gender violence by intimate partners*, Rev Saude Publica 2005;39(5)
- Levant R, *The New Psychology of Men*, New York 1996, in, Walker L, *Psychology and Domestic Violence Around the World*, [online] American Psychological Association 1999
- UNFPA, *Ending Widespread Violence Against Women*, [online] no date, available from: <http://www.unfpa.org/gender/violence.htm>, [Accessed 24 May 2006]

that are focused on childhood obesity: to reduce the proportion of children and adolescents who are overweight or obese to 5% and to “increase the proportion of children and adolescents...whose intake of meals and snacks at school contributes to good overall dietary quality” (Healthy People). Education and prevention are our best tools for reaching these goals. Many children learn by observation and therefore, role models are needed to guide children and help them to make healthy food choices and have adequate physical activity. Focus needs to be on the high risk population of minorities and the economically disadvantaged. Although the prevalence of childhood obesity is rising most rapidly among African-Americans, Hispanics, and the poor and middle classes, no portion of the population is unaffected. Health care systems need to screen patients and identify at risk children for early intervention.

References

- American Academy of Family Physicians (AAFP). (2005). *Childhood Obesity and Nutrition Briefing Document*. Retrieved September 5, 2005 from: www.aafp.org/x26524.xml.
- Andersen, R., Crespo, C., Bartlett, S., Cheskin, L., & Pratt, M. (1998). Relationship of physical activity and television watching with body weight and level of fatness among children. *JAMA*, 279(12), p.938-942.
- Baker, S., Barlow, S., Cochran, W., Fuchs, G., Klish, W., Krebs, N., et al. (2005). Overweight children and adolescents: A clinical report of the North American society for pediatric gastroenterology, hepatology and nutrition. *J of Pediatric Gastroenterology & Nutrition*, 40(5)533-543.
- Center for Science in the Public Interest. (2004). *Dispensing junk: How school vending undermines efforts to feed children well*. (pp 1-18). Retrieved September 5, 2005, from http://www.cspinet.org/dispensing_junk.pdf.
- Centers for Disease Control and Prevention. (2000). School Health Policies and Programs Study (SHPPS) 2000.
- Centers for Disease Control. Prevalence of Overweight Among Children and Adolescents: United States, 1999-2002. Retrieved September 5, 2005, from www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm.
- Cline, K., Spradlin, T., & Plucker, J. (2005). Child obesity in Indiana: A growing public policy concern. *Center for Evaluation & Education Policy: Education Policy Brief*, 3, 1, 1-8.
- Deckelbaum, R. & Williams, C. (2001). Childhood obesity: The Health Issue. *Obesity Research*, 9, Suppl. 4:239S-243S.
- Healthy People 2010 Objectives. Retrieved September 5, 2005 from: www.healthypeople.gov/document/HTML/Volume2/19Nutrition.htm#_Toc490383122.
- Morbidity and Mortality Weekly Report. (2000). *Youth Risk Behavior Surveillance --- United States, 1999*. June 09, 2000 / 49 (SS05);1-96.
- US Department of Health and Human Services. (2004). *Statement by R. Carmona*. Retrieved May 20, 2004 from: www.hhs.gov/asl/testify/t040302.html.

Continued from page 15—Patient Safety

Eight years have passed since the public health problem of medical errors was broadcasted. The response still captures the public and medical community's attention; Congress continues to allocate special funds and debates; the media discloses headline news of unsafe hospitals across the nation; and the medical plus legal community presses forward to scrutinize medical errors research. We can only guess how patient safety will be addressed in the next century. Perhaps, in medicine, a patient safety committee (analogous to hospital risk management) will govern the responsibilities of providers to disclose and report personal / other's errors. Possibly, in law, the civil-jury malpractice system will be replaced with special non-jury based courts (e.g. medical courts). This is just a two of many possibilities. Unfortunately, there is no U.S. empirical research to aid such guesses. History, though, tells us that the outcome will be affected by societal views and advancements. Both parts will significantly affect the public health study of medical injuries.

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