



APHA-SA Student Issue

Summer 2008



A Publication for Students by Students

A letter from the Editors

Dear Students,

We are pleased to present the second annual special student supplement issue of *News & Views*. While the regular issues of *News & Views* present short news articles, this special supplement issue is intended to provide students with a more open format for publishing articles on public health related topics of interest to you. As students ourselves, we understand the need to have a channel where you can write about and share your own experiences, research and opinions about public health issues. This publication will also be helpful to you to get your feet wet so that in your career, you can submit and publish your work in journals and other professional publications.

We hope you enjoy this issue. As always, watch for e-mail announcements calling for submissions for the fall issue of *News & Views*. Until then, have a wonderful summer!

Sincerely,

Olivia Wackowski and Kimberly Rogers
APHA-SA Newsletter Co-Chairs

In This Issue

President's Pen-Tips for Securing Student Grand Funding.....	p4
Media and Public Health-2008 APHA National Student Meeting.....	p6
Women of Color and HIV/AIDS: An Overview.....	p7
A Need for Diabetic Screenings.....	p8
IQ: How Accurate a Measure Is It?.....	p9
Obesity in America: Don't Always Blame the Victim.....	p11
Gender and Depression: A Differential Worth Noting.....	p12
Working to Fight Colorectal Cancer - A Collaborative Team Effort.....	p14
Environmental Justice - An Appalachian Perspective.....	p15
Diabetes Disparities: Intervention Programs among Indigenous Populations.....	p17
The Power of Women Entrepreneurs.....	p19

PRESIDENT'S PEN

By Tamar Klaiman, Chair APHA-SA

Dear Students,

I hope you are all enjoying the summer. For this installment of *President's Pen*, I thought I would talk about an issue that is on the mind of almost every student - funding. Whether you are looking for funding for a particular project or for tuition, many of the same rules apply. Hopefully, I can offer some tips and lessons learned from my own experience and point you to resources that you will find helpful.

1. Talk to faculty

If you are thinking about starting a new program or are already in one, talk to the faculty at your institution. Many faculty have Research Assistant positions open, but have not advertised them. You can often find a position if you catch a professor just when a grant has been funded or they are beginning a new project.

If you are offered a position, be willing to pay your dues. Initially, you may be doing work that does not feel like research, but be patient. As you prove yourself, you will be given more responsibility. Even if you aren't, a paycheck and/or tuition may be worth making copies and answering phones. If you find a position that is not in your specific area of interest, consider taking the job anyway. You will learn new things regardless of what your job entails and might gain interest in a new topic area or find a mentor. There are few students who can work on their area of interest both in class and at work.

2. Look for funding announcements

Funding opportunities will not come to you - you must seek them out. There are funding announcements for students posted in a variety of places including:

APHA-SA Student Opportunities website (http://www.apha.org/membersgroups/students/committees/APHASA_OpportunitiesCommittee.htm); ASPH website (www.asph.org); and Grants.gov (www.grants.gov). Additionally, your school or university may have a clearinghouse for student opportunities. Check with your advisor or career center.

3. APPLY!!!

If you find a funding announcement that interests you, first check to make sure you are eligible. There is nothing worse than putting an application together to find out that you are not qualified to apply. Additionally, check to make sure that the turn around time is reasonable (3-6 months is ideal for a full grant proposal), your research interests match the agency's mission, and that your advisor or mentor has time to assist you in putting the proposal together. It is a good idea to call the agency that put out the grant announcement and talk to them about your idea. The program officers are there to help, and they can tell you if you are on the right track as well as answer any questions.

Once you decide that you would like to apply, check with your institution to find out what internal documents are necessary for application. Most schools have a variety of forms to fill out, and they may need to submit the proposal for you for a federal grant. Including your institution early will help make the process go more smoothly.

Writing your proposal is the most crucial part. Be sure that you are clear and concise. Have multiple people read your proposal including at least one person who does not share your area of expertise. All reviewers must be able to clearly understand the proposal and most review panels consist of an interdisciplinary review board.

Proofread, proofread, proofread!! There is nothing that will get you to the bottom of the pile faster than a proposal that has spelling and grammar errors. Do NOT depend on spell check. Read the document yourself and have others read it as well.

Even if a grant seems out of reach, I encourage you to apply. Going through the grant writing process will help you learn and it will go more smoothly each time (I don't think it ever gets "easier"). Also, you never know how many other people are applying for a grant. A lot of students worry that their applications won't be competitive and they don't apply. This often leaves a small pool of applicants making your success more likely.

4. Waiting

Waiting is a frustrating, but a necessary part of funding proposal submissions. While you are waiting it is a good idea not to dwell on the outcome of your submission. Agonizing over a grant proposal will not affect the outcome. The time to agonize is while you write it. If you send in a solid proposal, you will worry less about the result. Of course, that doesn't mean it will be funded, but you will feel better that you did your best. Do not call funding agencies about the review process unless they contact you with questions or it is after the date they said they would let you know. Pestering funding agencies during the review process is irritating to them and won't help your cause.

5. You got funded! Or not.

When you receive the decision, feel free to do a merry jig (if you got it). If you didn't you still have options. First, spend a day feeling sad and dejected. It is okay to be disappointed; however, do NOT call the funding agency and plead your case or argue about reviewer comments. This is not professional and they WILL remember you in the future.

Consider reapplying after integrating the reviewer's comments. Few grants are funded on the first try, especially federal grants. However, if you address the concerns of the review committee, you will be far more likely to succeed on the second try. Also, continue to look for other opportunities. It is possible that your research was interesting, but did not align closely enough to an agency's mission. Try to find other venues to submit your work to.

DO NOT GIVE UP! Everyone gets rejected. EVERYONE. The more you work at it, the better you will become, and you will still get rejected from time to time. There are a lot of researchers often competing for the same small pot of money, and no one has every proposal funded.

6. Have fun

If you don't enjoy the work you are doing, stop doing it. If you are interested in doing research throughout your career, do research on something you care about. Funders can read between the lines and will not pay for something the researcher doesn't believe in. More importantly, life is too short to not like what you are doing!

I hope you will find this helpful. Many of these points I learned from submitting my own proposals (some of which have been funded, some not), and attending grants seminars. These are only some small tips for getting funding. I would recommend you go to grant writing classes at your university whenever you can. I always learn something new at each one I attend. If you are writing a proposal this summer, good luck! Be sure to take some time out to enjoy the weather!

All the best,
Tamar

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MEDIA AND PUBLIC HEALTH: A CONNECTION YOU CAN MAKE

*By Cherise Wong, APHA-SA Action Co-Chair,
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Greetings from the APHA-SA Action Committee and congratulations to all the recent graduates! As we all look forward to the sun, warmth, and beach days of summer, let us not shed the many other tasks we can continue to involve ourselves in as public health professionals and advocates for the nation's state of health.

If you have been following the Action Committee's monthly action alerts on legislative updates, you are well aware that this year has been one of excitement. Within the US, many states have sought to improve their health care systems and reduce their uninsured populations. Additionally, the nail biting 2008 Presidential Primaries have kept us all on the edge of our seats, and the empowering theme of National Public Health Week's "Climate Change" helped contribute to the pace of global environmental change.

But rather than catalogue the multitude of progressive steps that have been taken in public health this past year, I would encourage you to take up a public health advocacy role that continues to push forward. In a recent event I attended within a series of leadership seminars, Harvey Fineberg, president of the Institute of Medicine, came to speak. A particular morsel of Dr. Fineberg's overarching message stuck with me. I came away adding to my definition of what leadership encompassed and realized that to lead meant to better practice leadership by persuasion.

As I share my experience with you, fellow members of APHA, I would like to encourage you to participate in and attend this year's upcoming APHA National Student Meeting. Geared specifically towards media advocacy training in public health and developing the necessary skill-set to serve as a bridge between science and the general public, a half day education and training session will be offered October 25th 2008 entitled, "*Media and Public Health: Translating Research into Practice*".

A health policy professor on the first day of class once addressed us all by saying with solemnity that "to protect others' health, you must speak up, you must have courage." Perhaps it was his delivery which magnified the intensity of his message, but the truth of Dr. Navarro's words continue to roll forward with inspiration for me, and it is my hope that they will inspire the greater APHA community as well.

If you would like to learn more about advocacy opportunities or even initiate them with APHA-SA Action Committee's assistance, please do not hesitate to send an email our way at action@aphastudents.org. For this year's upcoming student meeting, more information will be available online at <http://www.apha.org/meetings/> and we hope to see you there!

WOMEN OF COLOR AND HIV/AIDS: AN OVERVIEW

*By Ndidi N Amutah, PhD student, MPH, CHES
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HIV/AIDS is a major cause of morbidity and mortality among black women in the United States. In addition, the life experience of African American women living with HIV/AIDS is an area in which insufficient research exists in general.¹ A study by Whitmore et al. (2005) reported that black women are increasingly affected by HIV, and despite prevention efforts and advances in HIV treatment, black women are more likely to become infected with HIV or to die of AIDS than are women of other races/ethnicities.² Black women are more likely to face the challenges associated with risk for HIV infection, which include poverty, at-risk partners such as men who are bisexual, or injection drug users.²

Additionally, increasing proportions of new AIDS diagnoses among black women may reflect disparities in testing behaviors, whether and how they seek healthcare, differential effects of HIV anti-retroviral therapy, lack of early access to medical care, and lack of early access to drug therapies.³ In 2002, black women were diagnosed with HIV infection at a rate approximately 23 times the rate among white women (3 per 100,000) and four times that among Hispanic women (17.2 per 100,000).² In 2002, although black women represented 13% of all women in the 50 states and the District of Columbia, they accounted for an estimated 67.8% of new AIDS diagnoses among women. This distinction is even more staggering when looking at the regional variations. In 2002, the AIDS diagnosis rate for black women in the northeast was 82 per 100,000 which was considerably higher than for the next highest region of the south at 48.1 per 100,000.²

In regards to the routes of transmission for women, the majority of women who were diagnosed with HIV contracted the virus through heterosexual contact with a male. From 1999 through 2002, an estimated 80.1% of black women with a diagnosis of HIV infection had been infected through heterosexual contact with an injection drug user, a bisexual man, a man with hemophilia, or someone who was a transfusion recipient with HIV infection.²

Women who are HIV positive face a myriad of problems related to their status including but not limited to: childcare, treatment options, transportation options, substance abuse counseling, and housing. DC Appleseed state in their report, “Many people living with HIV/AIDS struggle with multiple needs. Proper health care, housing, food, income, and transportation are necessary to effectively manage and treat their disease...limited access to health care and support services, and poverty often result in these needs being unmet.”⁴ Results from a 1996-1997 study found that one-third of people studied living with HIV delayed or did not obtain medical care because of other needs, including food, clothing, and housing, or barriers such as transportation, employment obligations, or severe illness.⁵

Barriers to use of health services for women include lack of insurance, current injection drug use, and difficulty remembering appointments. For example, going without care because of needing money for food, clothing or housing, or postponing care because of a lack of transportation, have all been associated with using the emergency department for outpatient care and reporting low overall access to care. Unmet needs for basic necessities such as child care remain high among HIV infected persons with dependents and may disproportionately affect women. Supplementing unmet competing needs of health may be necessary to maximize use of available health services.⁶ Wyatt, et al. (2002) found that African American women who were HIV positive were more likely to report histories of severe child sexual abuse, and this may have increased sexual risk taking practices.⁷ The observed higher morbidity and mortality rates for HIV and AIDS in women of color were likely attributable mainly to differences in socioeconomic resources, exposure to violence, and exposure to risky sexual behaviors. In conclusion, there are many issues that contribute to a woman of color being at high risk of HIV infection, and after a woman is diagnosed, disparities continue to exist in her treatment and access to care. References on page 10

A NEED FOR DIABETIC SCREENINGS

By Wilbur Boothby,

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For years, there have been a number of research studies attempting to calculate the total burden of all amputations related to diabetes. According to Levin (1995), the annual rate of diabetic-related amputations conducted within the United States is estimated to be about 52,000: 20% are toe amputations, 5.8% are mid-foot amputations, 38.8% are below-the-knee amputations, and 21.4% are above-the-knee amputations.¹ For the most part, diabetic amputation remains a major burden on health care resources with a high postoperative mortality and an extensive inpatient stay - an average post-amputation hospital stay ranges from about 21-28 days. Medicare cost for one of the types of amputations, a below-the-knee amputation, is estimated to be around \$59,410.

The cost of diabetes treatment more generally is phenomenally high. The American Diabetes Association updated their new estimated diabetic cost for the United States to be around \$174 billion in 2007.² The direct medical cost of \$116 billion is broken down to \$27 billion for general diabetic care, \$58 billion for complications from chronic diabetes, and \$31 billion for excess medical costs. An estimated annual cost of a diabetic patient's health care is \$11,744. Indirect medical costs, such as disability or loss of work, are estimated to be around \$58 billion. However, estimating the true cost of diabetes can be challenging because the associated complications are dictated by a variety of elements of the health services and, more importantly, the health professionals from the various medical specialties. Even though it is estimated that about 20 million people are affected with diabetes, it is difficult to calculate the total cost of those who are unaware of their new disorder or are on the cusp of developing diabetes. Some people just do not feel it is necessary for them to visit a health care professional or cannot afford the visit. This would only inflate the current estimations for our nation's health care burdens.

Despite the alarming numbers, no monetary value can gauge the cost of the mental and physical distress that a patient will individually experience in his or her lifetime after a diabetes-related complication, such as an amputation. An individual's amputated limb demands a dramatic change in their once normal lifestyle. Activities they previously enjoyed are now restricted to the functional limitations of their amputated limb.

To lower the disability and high medical costs due to amputations, there should be a greater emphasis on identifying the individual at risk and preventing the development of severe diabetes causing lower extremity amputations. One approach to this is to make it mandatory for public schools to perform a diabetic screening at least once every year on their students. Both federal and state governments can provide financial support to sponsor diabetic screenings, since it would be of long-term benefit in reducing health care costs. Another alternative in financing diabetic screenings is to have a health care professional provide free services to public schools. With the assistance of local health care professionals, they not only can filter out high risk students (from 5th grade to high school), but can obtain valuable information relating to individual families' health history. At the same time, students can be educated on risk factors to watch for and how to prevent developing diabetes.

By educating young children or adults at an early age and utilizing early detection methods, the cost of long-term diabetic care can gradually be reduced. By performing diabetic screenings, health care professionals can accurately maintain records and swiftly attend to those who may show risk factors for diabetes mellitus. Children educated about diabetes would take their new found knowledge to their family members, who in turn would be more inclined to visit a local health care professional at their child's request. References on page 10

IQ: HOW ACCURATE A MEASURE IS IT?

By Andrea Frydl,

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One's intelligence quotient, or IQ, is assumed to be a valid measure of intelligence. However, IQ is a social construct—defined only by what society determines is intelligence. In clinical neuropsychology, tests that are used to determine intelligence are the Wechsler Adult Intelligence Scale (WAIS), Raven's Progressive Matrices, and the National Adult Reading Test. Although these tests are reliable in the sense that if you give them repeatedly to the same person, his scores will not deviate significantly, their validity or real-life applicability remains unanswered. How valid are these tests? How much of a measure of intelligence are they? What is intelligence?

David Wechsler, a prominent psychologist and the developer of the WAIS, defined intelligence as, "The global capacity of a person to act purposefully, to think rationally, and to deal effectively with his/her environment."¹ This formal definition, whether or not appropriate, speaks to an individual's global ability to interact effectively in his environment. However, one might wonder whether these IQ tests are valid measures of "intelligence". The organism is presented with, theoretically, novel stimuli and means to find patterns, solve problems, and recall answers with precision, speed and accuracy. However, the stimuli presented in these tests may not be directly translatable in the "real world".

For example, language is a component of the verbal WAIS test. An illiterate person too ashamed to disclose his inability to read might score abnormally low on the verbal component and thus be mislabeled as mentally retarded. This speaks to the underlying assumption in these tests that in order to score high, test takers must have been exposed to prior education. Additionally, Jenni Ogden, a prominent neurophysiologist, writes of some of the cultural issues associated with IQ tests in her book² and experts speak of how IQ scores are increasing worldwide at about a rate of three units per decade in a phenomenon called the Flynn Effect.³ These issues further call into question the validity of IQ tests.

There are many examples in which people with low IQ scores have accomplished extraordinary feats and have led very successful lives. For example, although fictional, the protagonist in *Forrest Gump* is borderline mentally retarded as determined from his IQ results and yet he is very capable of embodying a "global capacity to act purposefully...." In fact, the character is able to graduate high school, win a full scholarship to college, go to war and win the congressional medal of honor, open up a shrimp boat company, become a champion ping pong player, marry the girl of his dreams, and have a son all in one lifetime! Alternatively, you may recall many people with very high IQ scores that are not "successful" in certain expected situations, such as former classmates who scored over 1500 on the SATs but go on to maintain a low GPA in high school or later in college. Therefore, Wechsler's definition is missing a key component – not only do people need to have the *capacity* to live effectively in their environment, they need the motivation and *will*. Perhaps a more appropriate measure of IQ would be the sum of both capacity and desire to interact effectively in one's environment.

Lastly, an important concept to keep in mind from the brief discussion of IQ is that it is used all too often as an indicator of one's trajectory in our society. It helps place labels on people, helps decide where they go to college, and helps determine whether they can be part of exclusive membership clubs like Mensa. Although this seems to be decreasing to some extent, it is still a problem and brings with it a whole host of ethical concerns. If we label people at a young age as "average", "above average" or "below average" in regards to their intelligence, might this also have an effect on their subsequent behavior and how they perceive themselves? References on page 10

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OBESITY IN AMERICA: DON'T ALWAYS BLAME THE VICTIM

*By Daniel M. Saman,
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There have been strong libertarian viewpoints that have attempted to understand the obesity epidemic in this country. Those arguments are along the lines of blaming the victim for making poor lifestyle choices about diet and exercise. Though some public health proponents argue that there are far too many fast-food restaurants off of highway exits and that the government should mandate the density of these establishments, libertarianism posits that this action should rise from people themselves (i.e., the market), and that if the market wanted healthier options, it would demand it. This philosophy stems from the economic ideas of Adam Smith, a proponent of laissez faire government and the free market. The problem with this approach is that the market place has failed the American people with regard to health.

These arguments blaming people for their weight problems might be more effective and believable by the public health arena if this were a controlled problem that affected the few rather than the many. However, since obesity is now an epidemic, it seems that there are fundamental and systematic problems within our society. One of the fundamental arguments in public health is that health behavior is subject to numerous influences. Blaming people for 'misbehaving' may be applicable to small individual level problems, but not an epidemic that affects nearly every community in the United States. There must be some other answer(s) besides simply making poor choices that fuels obesity in America. These answers should come from looking at a system of influences that include individual, interpersonal, community, cultural, and organizational levels. Reasoning should follow that people behave the way they do because of a system of influences. Some of the most basic reasons why there is an obesity epidemic in America are that there simply are not enough healthful alternatives and what is available is too expensive for most people.

Another reason why Americans are experiencing an obesity epidemic is due to the physical environment. The obesity epidemic is an environmental problem due to increased level of food consumption and a decreased level of physical activity. Obesity in America is fueled by plentiful access to cheap and fatty foods, which may be disproportionately used for regular meals by the poor. In addition, the physical environment for most Americans is not conducive to getting even passive exercise, e.g., having an environment with walkways that allows one to be able to walk to work, school or the grocery store. Though we cannot guarantee that everyone will walk, the hopes are that walking can be made more convenient and accessible such that people will willingly opt to walk instead of drive. Passive exercise is the best way to lose weight because you do not even know you are doing it. Fighting obesity in America is about taking responsibility *and* manipulating the physical environment to create a milieu where exercise occurs passively.

Individuals need infrastructural support to lead healthy lives. Public health law should allow public health authorities power to regulate individuals and businesses to achieve the communal benefits of health. The idea of achieving the best for everyone is an economic idea made popular by Princeton University economics professor John Nash. Nash's idea made null the laissez faire approach promoted by Adam Smith by mathematically proving that acting with a concern for all is economically better than acting with a concern for oneself.¹ The government has to start acting as though it has a legitimate concern for everyone.

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GENDER AND DEPRESSION: A DIFFERENTIAL WORTH NOTING

*By Andrea Frydl,
Johns Hopkins School of Public Health*

Gender plays an important role in the manifestation of mental disorders. In particular, major depression is exhibited with a higher prevalence in women than men.¹ This difference can be attributed to many factors. The most convincing factor includes disproportionate emphasis by gender on social roles and varying life experiences.

Major depressive disorder (MDD) is defined by the Diagnostic and Statistic Manual, 4th edition (DSM-IV), as a prolonged period of depressed mood in which a variety of listed symptoms are manifested.² MDD can be categorized as recurrent or single-episode. It can also be affected by several variations (i.e., chronic, with melancholic disorder, with atypical features, etc). MDD is considered the leading cause of disability among adults in the world.³ About 6.7% of the U.S. population is afflicted with major depressive disorder.^{4,5} In addition to this, women have much higher prevalence rates of MDD than do men.⁶

In fact, Kessler and colleagues estimated that women had a greater than 1.5 odds ratio of lifetime incidence of MDD when compared to males.⁶ These odds for MDD are seen cross culturally as well.¹ The high rates of MDD are accounted for by new cases (incidence) of depression, rather than prolonged existing cases.¹

There are several theories as to why women have higher rates of depression. One theory is that women are better at reporting symptoms than men. However, this theory has been studied extensively and men are just as likely to report symptoms as women.⁷ Other theories include biological differences due to hormonal changes associated with menopause. Rather than discount this completely, it is important to note that the highest incidence rates of MDD in women occur between the ages of 15-44³ and thus are unlikely attributed to menopause, which occurs during later years of life. What is more likely is that hormonal and postpartum issues during reproductive years are involved in the incidence of depression.¹

What does sound like the most intriguing and well mapped out theory on the high rates of depression in women is the theory that women have social roles to which they must abide throughout the life events that they encounter.⁸ Brown (2002) proposes that female depression is attributed to disruptions in roles, to memory-linked emotional schemas, and to specific meaning (i.e., entrapment or humiliation).⁸ All of these factors are bidirectional and they influence each other. Brown's conceptual model has been a good predictor of the etiology of depression in women cross-culturally as well.⁸

In addition to all of the above theories, women are likely to suffer higher rates of depression because they are more likely to be abused and victims of violent crimes like rape, domestic violence, and prostitution. The World Health Organization estimates that 14% - 20% of women in the U.S. will have suffered a completed rape.⁹ An estimated 62% of rape victims in the U.S. are age 15 or less.⁹ Rape, along with other acts of violence, fall into George Brown's conceptual model for depression⁸ and can thus cause an episode of major depression.

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Major depressive disorder is more commonly seen in women than in men. This gender differential has been theorized to be attributed to many factors, such as greater emphasis on social roles, violent or traumatic life experiences, and physiologic or somatic differences. Genetic and environmental causes play a role in some types of anxiety disorders, however these factors do not change across gender, and thus the differential cannot be solely attributed to genes or environment. It is important to point out that the differences seen in women for MDD is not simply attributed to women seeking more medical help. Future research should seek to learn more concrete rather than speculative reasons about the causal factors for why women have higher rates of depression.

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WORKING TO FIGHT COLORECTAL CANCER- A COLLABORATIVE TEAM EFFORT

*By Maureen Dailey,
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Colorectal Cancer (CRC) is the second cause of cancer related deaths that are preventable in the United States^{1,2} and national programs and guidelines have been developed to aid in prevention, early detection and treatment. The United States Preventative Services Task Force provides guidelines for CRC screening in populations fifty and over with usual risk³ while the American Cancer Society has published guidelines for higher risk populations (e.g., those with inflammatory bowel disease and family history).⁴ State level Comprehensive Cancer Control Programs (CCCPs), based on frameworks provided by the Centers for Disease Control and Prevention⁵, work to provide statistics and research as well as prevention and screening programs on a local level.

Clinicians, nurses, researchers, and other interdisciplinary team members are further able to promote CRC educational messages and practices through their front line access to patients, family members and other caregivers. Indeed, clinicians have become involved in improving access to public health at the national association level (e.g., colon and rectal surgeons supported CRC genetic screening centers⁶), at the state and national public policy level, and at the coalitions and grass roots community-based level to improve CRC screening. In New York, nurses of the Northeast Region (www.nerwocn.org) of the Wound, Ostomy and Continence Nurses Society (WOC) (www.wocn.org) planned an interdisciplinary panel that included survivors and advocates to improve CRC cancer screening in order to close knowledge gaps regarding genetic testing issues, share ideas, and commit to increased public policy and community-based advocacy. Since the CRC screening advocacy panel presentation, the Genetic Information Nondiscrimination Act was signed into law, now prohibiting discrimination based on the results of genetic tests.⁷

Community events also serve as channels for promoting advocacy and raising awareness. In 2008, the WOC nurses supported the annual New York Colorectal Cancer Challenge (<http://www.coloncancerchallenge.org>), a race that engages clinicians, researchers, public health and policy leaders, survivors, family members, industry partners (e.g., endoscopy manufacturers and pharmaceutical companies), insurers, and other stakeholders, from 37 states and seven countries. The race is organized and directed by the Partners in Prevention (a program of Montefiore Medical Center and the Albert Einstein Cancer Center) and the Colon Cancer Alliance, the voice of survivors. Funds raised at the race support the mission of both these organizations. The next race will occur in late March or early April of 2009.

To learn more about state-based CRC screening program priorities and statistics, potential program and research partners, research on prevention programs, and effectiveness strategies for programs, visit http://cancercontrolplanet.cancer.gov/colorectal_cancer.html

References on page 16



ENVIRONMENTAL JUSTICE—AN APPALACHIAN PERSPECTIVE

*By Sheila Davidson Pressley,
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We have all sought justice for one reason or another based on our social and economical experiences, but you may not be familiar with the term “environmental justice”. Let us first review the formal definition for “EJ” as it commonly called. The U.S. Environmental Protection Agency (EPA) defines environmental justice as “the fair treatment for people of all races, cultures, and incomes, regarding the development of environmental laws, regulations, and policies.”¹ The concern that African Americans and other communities of color bear a disproportionate amount of adverse health and environmental effects has been a topic of discussion for decades. The spark for the EJ movement came in 1982 when a rural, poor, and mostly African American county in North Carolina was selected as the site for a PCB landfill.² Polychlorinated biphenyls (PCBs) are a mixture of individual chlorinated chemicals used as coolants and lubricants in transformers and other electrical equipment.³ The production of PCBs was stopped in the United States in 1977 because of evidence that showed harmful human effects, but they are still found in the environment.³ In fact, the EPA and the International Agency for Research on Cancer (IARC) have determined that PCBs are probably carcinogenic, or cancer causing in humans.³ Warren County, North Carolina was chosen as a PCB landfill site because it seemed like an easy target with the least amount of resistance. The builders of the landfill assumed that rural, poor, black residents would not be able to fight such a development. The residents of Afton, North Carolina formed a group called the Warren County Citizens Concerned About PCBs, gathered over 400 protesters, and voiced their disapproval of the landfill.⁴ It was during these demonstrations that the term “environmental racism” was born. Environmental racism is racial discrimination in environmental policymaking.

Environmental justice has also affected people residing in Appalachia. The communities in Appalachia are mostly composed of rural whites and African Americans, but the African Americans in Appalachia are often forgotten because these communities are usually portrayed in books and media as poor and white. Most history textbooks do not mention the fact that some slaves retreated to the mountains to be free and that many labored in the coalmines along with white miners. As time went on, African Americans stayed in Appalachia and made the mountains their home. In 1974, more than 1.3 million blacks lived in the Appalachian region reaching from Mississippi to New York.⁵ According to the book, *Blacks in Appalachia*, African Americans in Appalachia were a “neglected minority within a neglected minority.” This circumstance was only worsened by environmental injustices such as extracting coal using mountaintop removal. This practice became popular in the mid 1970’s and was also known as strip mining or surface mining. The mountaintop removal method was almost exclusively conducted in Kentucky and West Virginia. Communities in Eastern Kentucky and West Virginia know about the impact of such practices all too well. Mountaintop removal involves removing the cap of a mountain to extract coal while the masses of earth and rock are shoved into nearby lakes, streams and rivers that pollute the water and kill aquatic life. The removal creates black water or sludge that is kept in dams that are not always safe and cause flooding in the valleys.⁵

Both blacks and whites have endured substandard treatment from coal mining companies for decades, but much of the story remains untold. Many of the families who remain in Appalachia are waiting for justice as it relates to environmental and social needs. How will the new developments in the environmental justice movement help America’s poor and underserved families? The answer may lie with new legislation. The current congressional bill labeled as HR1103, the Environmental Justice Act of 2007, would codify Executive Order 12898. In 1994, President Clinton signed Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The primary intent of Executive Order 12898 was three-fold. First, it was to assist federal agencies in recognizing environmental justice as an issue, thereby leading to the formation of EJ workgroups and the formation of Office of Environmental Justice at EPA Headquarters.

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Second, it required EPA and the other federal agencies to have a written plan to address EJ issues germane to their organizations. Third and most importantly, the executive order gave impacted communities a chance to gain awareness and be educated about environmental health issues. Many believe that if HR 1103 is enacted, more enforcement by the EPA and the Department of Justice must be implemented in order for communities to see relief from disproportionate and cumulative pollution burdens. The last action by Congress on the bill was on October 4, 2007, when the House Energy and Commerce Committee held a hearing on the Emergency Planning and Community Right to Know Act (EPCRA). EPCRA was created in 1986 to help communities plan for emergencies involving hazardous substances. This hearing examined both changes to the Toxics Release Inventory Program under the Bush Administration, as well as the legislation introduced by Congresswoman Hilda Solis (D-Calif.) and others to codify the executive order on environmental justice. This new legislation is hopefully only a new beginning to the environmental justice movement, but our past history shows us that if we seek and demand change, it can occur.

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DIABETES DISPARITIES IN THE UNITED STATES: INTERVENTION PROGRAMS AMONG INDIGENOUS POPULATIONS

*By Laura Nellums,
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The Indian Health Service (IHS) describes that, “American Indians and Alaska Natives carry the heaviest burden of diabetes in the United States, suffering from among the highest rates of diabetes in the world.”¹ In 1997, Congress established the Special Diabetes Program for Indians (SDPI), a grant program designated to establish diabetes prevention and treatment programs through grants administered by the IHS. This program, providing \$150 million per year to tribal and Indian health programs within the United States, is a critical resource for decreasing the prevalence of diabetes among Native Americans and helping those with diabetes to maintain their health.²

American Indians and Alaska Natives face a higher prevalence of type II diabetes than any other racial or ethnic group in the United States.^{3,4} The National Indian Health Board (NIHB) estimates that Native Americans face a diabetes mortality rate 4.3 times higher than that of the general U.S. population, and are diagnosed with diabetes 2.6 times more often.⁵ Furthermore, though type II diabetes in children and adolescents is rare, it is significantly more prevalent in Native American populations. The NIHB reports that among American Indian and Alaskan Native individuals between 15-19 years of age, the rate of diabetes has increased 106% between 1990 and 2001.⁶ However, 80% of cases of type II diabetes are preventable.⁷

Though the cause of diabetes is not known, there is a clear correlation between overall health and the development of the disease. Obesity, physical inactivity, unhealthy diet, tobacco use, and substantial alcohol consumption are all acknowledged as possible contributing factors to the development of this disease, and are considered in investigations into the correlations between socioeconomic status, race, and the risk of developing diabetes.⁸

There are visible and alarming increases in the incidence of diabetes, and more specifically type II diabetes, in communities where major changes have occurred in lifestyle and diet. These changes represent significant agents in the development of the diabetes epidemic in Native American populations in the United States. N.P. Steyn et al argue, with regards to diabetes, that “Changing disease rates are almost certainly explained by changes in several dietary factors as well as by changes in other lifestyle related factors, notably a reduction in physical activity.”⁸

It is critical that lifestyle changes are accounted for and that need is assessed based on the community and its practices. Dietary customs, for example, must be examined with a cultural awareness of their meanings in specific communities. Among the Navajo, ‘strong foods’ play a significant role in ceremonies and in cultural approaches to maintaining health.⁹ As changes have occurred in dietary practices, the category of ‘strong foods’ have come to include hamburgers, soda, and pastries. Because these foods now have cultural significance, a program that indicates ‘unhealthy’ foods should be avoided may come into conflict with other valued practices that may have priority. Community participation is necessary to allow for relevant and effective programs. Thus, it is critical that community structures and practices are considered and incorporated into any program.¹⁰

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The UN Declaration on the Rights of Indigenous Peoples asserts that, though these populations are often separated from the general US population geographically, ethnically, and economically, they still require the same standards and availability of care, especially because they are a high risk population.¹¹ Furthermore the declaration states that, “Indigenous individuals have an equal right to the enjoyment of the highest attainable standard of physical and mental health. States shall take the necessary steps with a view to achieving progressively the full realization of this right.” Not only should indigenous peoples have access to care, but, when disparities in health conditions exist, as is the case with the diabetes epidemic, the affected individuals still have a right to their health and states have the responsibility to address these needs to the fullest extent. The SDPI is an important effort in the pursuit of these rights.

The Special Diabetes Program for Indians has been successful in establishing programs focused on physical activity in schools within these communities, wellness programs focused on prevention and management of diabetes, and education within the communities focused on diabetes prevention through improved nutrition and activity.⁶ The program has further been significant in affecting the diabetes epidemic through subsequent increases in services for those diagnosed with diabetes and those at risk and in pursuing further research into the epidemic and the high risk communities.

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THE POWER OF WOMEN ENTREPRENEURS

*By Jamie Zwiebel,
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Laughter and singing stir the cool morning air as 20 women gather around a table framed by palm trees. Twenty-two year old Georgina sits in the corner, intent on her embroidery. In the opposite corner, her friend Maritza calls, “Hey Georgina! How is your son?” “He’s in the hospital with a tumor,” she replies. “May God keep him safe and bring him home to us.” Georgina is not in the hospital with her sick son because she is here learning to sew. She knows that the potential income from her sewing will, in the long-run, help her son more than her physical presence. Georgina and Maritza are part of a cooperative—indeed, part of a greater movement—that is changing the world more than any World Bank project or United Nations mission ever could. The instigators of this change are not politicians, businesspeople, or headline-making activists; rather, they are women entrepreneurs.

In organizations like Georgina and Maritza’s cooperative microbusiness, producers split the profits equally and share a bank account. The sewing cooperatives in San Ramón, Nicaragua involve 60 women in three communities and promote economic stability (in a country where unemployment is at 80%) by generating sustainable income for women and their families.

Georgina and Maritza are not alone. Women entrepreneurs are starting cooperative microbusinesses all over the world, running hardware stores in Bolivia, software start-ups in Bangladesh, and cassava stands in Benin. All the sewing cooperatives needed were start-up resources, which in Georgina and Maritza’s case came in the form of a \$10,000 grant from American philanthropist Katherine Wasserman Davis. To mark her 100th birthday, Mrs. Davis gave out 100 of such grants to projects that “bring new thinking to the prospects of peace in the world.”¹

As a recipient of one of these grants, in the summer of 2007, I worked with these two women and their 60 colleagues in San Ramón to start up the sewing cooperatives. During this project, I was amazed to see how such a relatively small investment could make such significant changes in the lives of these women and their families. For instance, several women told me that having this income base so close to home prevented them from having to migrate to urban slums to find work.

Many organizations such as Kiva.org, the Grameen Bank, the Trestle Group Foundation, and Goldman Sachs are realizing that empowering women entrepreneurs is one of the most effective and efficient ways to combat poverty in developing countries.² They invest in women by loaning money to them at little or no interest, or by providing access to business coaching and education so that they can grow their businesses. Since women make up 70% of the world’s poor, have a tendency to be the primary caretakers of children, and have been shown to more readily pay back loans and even become lenders themselves, investing in women is a good idea. The women entrepreneurs are not only supporting their families, but are helping to fuel the global economy.

Schools, as well as religious and civic organizations are catching on to this microbusiness trend. For example, the Social Entrepreneurs, a group of students from Grinnell College in Iowa, raise money to make loans through Kiva.org. Once registered with Kiva, anyone can loan to specific entrepreneurs or to groups, and once one’s initial loan is repaid, it can be loaned out again. Thus, one’s money continues to cycle through the developing world and supporting entrepreneurs. The group at Grinnell College has also forged partnerships with organizations in Malawi and Nicaragua that administer loans to entrepreneurs in developing countries. Since 2007, they have raised \$4,638.65 and loaned \$5,040 to such entrepreneurs.

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Similar groups exist at Harvard University and Carleton College in Minnesota, in addition to the many ecumenical and secular groups devoted to microfinance or specifically to promoting women entrepreneurship.³

Meanwhile, in rural Nicaragua, 60 women in the rural mountains of San Ramón are using Mrs. Davis's investment to help themselves *salir adelante*, or go forward. With the help of people who believe in them, women entrepreneurs are transforming the world. If they all had just a little help to get started, imagine what they could accomplish.

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