



Winter 2011

Happy New Year!

As I write this, I am reminded of the many things that have happened in 2010 and all that we have to look forward to in 2011. We know that we are a global village, and what each of us does impacts the other in some form.

Now that we have reached the midline of the millennium goals time, we realize that it will be more difficult to meet them than previously thought. Some of them will not be resolved, but great strides have taken place and as we look forward and continue to work, we can also look back and see the progress that has been made.

During 2010, Nationwide Children's Hospital reached several milestones in achieving our strategic plan. We celebrated our fifth straight year as one of America's Best Children's Hospital according to *U.S. News and World Report*, received top marks from The Joint Commission, and moved forward in many other ways to reach the goals we set for ourselves. We were highly honored when President Barack Obama visited us and acknowledged the work being done at Nationwide Children's Hospital.

Nationwide Children's Hospital Updates

R. Lawrence Moss, M.D. is the new Surgeon-in-Chief. Dr. Moss currently serves as Surgeon-in-Chief at Yale New Haven Children's Hospital. His additional appointments include Vice Chair for the Department of Surgery, Robert Pritzker Professor of Surgery, Chief of Pediatric Surgery and Program Director for Fellowship in Pediatric Surgery at Yale University School of Medicine. He will begin his new role at Nationwide Children's in early 2011.

Last August, Nationwide Children's Hospital began operating the Level III Newborn Intensive Care Unit

(NICU) located on the Mount Carmel St. Ann's Campus in Westerville. With the 23 beds at this NICU, this collaborative makes Nationwide Children's one of the largest neonatal centers in the United States with 191 beds among its six locations around central Ohio.

Close to Home Outreach

Ohio's teens affected with HIV/AIDS, is on the rise and the Family AIDS Clinic and Educational Services (FACES) at Nationwide Children's Hospital is doing something about it! In support of the health and wellness of all the children in our community, the FACES clinic is providing a free testing center. Teens are encouraged to come in and get tested.

Effective this month, the hospital eliminated sugar-added beverages from the cafeteria, food court, vending machines, gift shops, off-campus food/vending locations, catering and inpatient room food service. This measure is in response to the increase in childhood obesity and diabetes.

Did You Know.....?

The practice of delayed umbilical cord clamping has been shown to improve hematocrit levels, leading to an increased number of oxygen-carrying red blood cells throughout the body.

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Mission Trip to Our Native Culture, South Dakota

By Lynda Peel, MA, RD, LD

My mission trip started out as an opportunity to help our Native Americans, but as it ended up, I was the one who was enriched in a very humbling way. The trip took 55 of us to the central South Dakota Crow Creek Indian Reservation. The expectations of what an Indian Reservation is all about were quickly dispelled. Most of the books, pictures and media that we normally absorb, do not describe what is really there.

Rolling hills dominate the landscape sprinkled with some farming and cattle. There are some American Bison (Buffalo) raised for their hides and meat to generate some income. The vastness of the beautiful hills and landscape is overwhelming, but one is reminded that there is really no income generating business to support the community financially. Most of the money coming into the area is from some governmental or charity support. This area is by far the poorest county in the United States, with a reported unemployment of 57%, and a per capita income of only \$5,213 as of 2000. It seems even worst now. Alcohol intake is high.

We are reminded that the history of this part of the country is still reeling from the effects of the Governmental relations of the late 1800s. These Native families are a very proud people who have deeply rooted traditions and customs, which although adapted to modern times, are very important. The area is called Sioux territory, but they like to be referred to as Atka Lakota which means "home of the people". An interesting note is that it is a true honor for a Native American to have served in the U.S.

Military. Quite often they will mention their heroes to be honored or remembered in their gatherings. We were privileged to be a part of Pow-Wows, drumming circles, and dinners with our Native Americans. This was a humbling experience to be included in this celebration. Family, spirituality, and tradition are of paramount importance for this culture. The invitation to the Pow-Wow included dinner and enjoying native dancing and drumming. Even though the Native Americans are of meager means, this was a gift to us as a group, with no expectation of any monetary return.

Our team was careful not to preach our beliefs to our hosts, but to offer love by our actions. Personally, I returned with a new and corrected appreciation of OUR Native Americans; one dotted with respect for a culture rich in traditions.

Lynda Peel has been employed at Nationwide Children's Hospital for almost 21 years. She is the manager of the Clinical Nutrition and Lactation Services, which expanded from Clinical Nutrition. Lynda and her group see patients across the continuum to optimize growth and development of pediatric, adolescent and select adult patients in our facility, community, and beyond. She says: "Mission work presents a great opportunity to connect with others – discover one another's culture, traditions, beliefs, - and unite as one".



Millennium Development Goals: Getting There From Here

The Millennium Declaration was created by world leaders at the United Nations in 2000 as a commitment and roadmap to build a safer, more prosperous and equitable world. Simply interpreted, the result was eight measurable goals known as the Millennium Development Goals (MDGs), to be reached by 2015. Having just passed the midpoint in 2010, here is where we stand now:

1. *Eradicate extreme poverty and hunger*

Halving poverty on a global level by 2015 remains an achievable goal, as evidenced by the successes in East Asia and the Pacific, the Middle East, and North Africa, where poverty levels have either been halved, or are on schedule to reach goal levels.

2. *Achieve universal primary education*

Primary education enrollment rates increased to 88 percent in 2007, nearing universal status. However, retention and dropout rates as well as the quality of education are issues that are proving to be difficult to overcome. Some areas, including Nepal and Ghana, require more rigorous methods of teacher evaluation/accountability and allocation of resources for learning materials and facilities. From Kenya to Egypt, Botswana to Tanzania, elimination of school fees and a focus on the inclusion of girls in the primary education system have yielded measurable progress.

3. *Promote gender equality and empower women*

Although the median age of marriage and limited land control have restricted progress toward this goal in

some countries, measurable progress has been made. Global figures indicate that the ratio of girls to boys enrolled in schools is at .96 and that in countries such as Rwanda and South Africa, women represent roughly half of the parliamentary bodies. Continued governmental policies to secure equal rights for women in marriage, business, and governance will yield benefits across all MDGs.

4. *Reduce child mortality*

Between 1990 and 2008, the number of children who die before their fifth birthday decreased by over 25 percent. Investments in large-scale immunization campaigns and skilled health workers have lowered the child mortality rate in many countries, including war-torn Afghanistan.

5. *Improve maternal health*

The maternal mortality rate is declining at less than 1 percent annually, far short of the 5.5 percent that the MDG target demands. Roughly 99 percent of these deaths are in developing countries. This is further illustrated by the fact that sub-Saharan Africa has 13 of the 14 countries with the highest maternal mortality rate. However, initiatives in Pakistan, East Asia, and the Pacific are significantly improving maternal health in these areas by investing in the health systems and providing mobile health care.

6. *Combat HIV/AIDS, malaria and other diseases*

While HIV infection rates are increasing in Eastern Europe and Central Asia, the number of newly infected people on a global level fell by over 20 percent between 1996 and 2005. Sub-Saharan Africa



- home to 88 percent of the 1 million people who die each year from malaria - saw the percentage of children protected by insecticide-treated bed nets rise from 2 percent in 2000 to 22 percent in 2008. Globally, tuberculosis cases have increased this past decade, partly due to multi-drug resistant strains, with India accounting for roughly one-fifth of all cases. The key to addressing these issues lies in bolstering existing health systems as well as creating targeted initiatives.

7. *Ensure environmental sustainability*

Environmental sustainability is not receiving the effort it deserves. With women in developing countries spending up to 25 percent of their time carrying basic supplies over long distances, it becomes easy to see how the MDGs tie into each other. Improvements on the harvesting and delivery of drinking water, fuel, and firewood can grant women more time for education and direct involvement in the community decision-making process.

8. *Global Partnership for Development*

A consensus has been reached by many of the wealthier countries to provide funding for the neediest and least developed countries. China in particular, has committed to continue to cancel debts and include more products for zero- tariff treatment.

Improving a nation's ability to respond to climate shocks and natural disasters will lead to progress in responding to the attendant disease outbreaks and agricultural losses.

ACROSS THE MILES

Former scholars wrote to tell us of their achievements:

Qingping Wu, MD (China, Anesthesia '06)

Received spring 2010 National Science Award

Rameshwar Pokharel, MD (Nepal, Surgery '04-'05)

Appointed Unit Chief at Tribhuvan University Teaching Hospital

Sakda Arj-Ong, MD (Thailand, Critical Care '09)

Participated in the annual Critical Care Conference at Ramathibodi Hospital and continues to collaborate with Dr. Gary Smith

Zhisheng Liu, MD (China, Neurology '08 – '09)

Promoted to Vice President at Wuhan Children's Hospital

Sebastian Ekenze, MD (Nigeria, Surgery '08)

Appointed Dean of Faculty of Medicine, University of Nigeria

Jianbo Shao, MD (China, Radiology '07–08)

Promoted to Vice President

Xiao Gu, MD (China, Urology 2010)

Currently a Clinical Researcher at Methodist Le Bonheur Children's Medical Center in Memphis, TN

Hui Yao, MD (China, Endocrinology '07)

Promoted to department head and received research grant.

Chandra Singh, MD (India, Urology '07)

Dr. Singh reported that CMC Vellore has been adjudged "India's most socially responsible hospital".



Welcome Advisory Council Members

Lisa Alianiello, RN, MSN started her nursing career at Nationwide Children's Hospital in 1989 as a student nurse. Over the past twenty she has worked as an RN in the Emergency Department, Transport Program and then as a neonatal nurse practitioner with the Transport Team and MEd Flight. Lisa completed her Master's in Nursing in 2002 and has been working in the department of Neonatology as a Nurse Practitioner since then.

Lisa took her first mission trip to Haiti (Fort Liberte) after the earthquake in Port Au Prince last year. She spent a week providing medical care to more than 1,000 patients who had very little resources and essentially no access to medical care. Lisa said "It was a wonderful experience and it inspired me to go back to school one more time to expand my practice as a Pediatric Nurse Practitioner with an acute care focus. I'll finish with this program in June 2011 and hope to expand my role here at NCH and continue with medical mission work in the future."

Jaclyn Rohaly, MA works for The Research Institute at Nationwide Children's Hospital where she manages both graduate students and international employees for The Research Institute. As the Business Services Coordinator, Jaclyn's responsibilities include hiring and tracking of graduate students, coordinating the eligibility issues of employment (e.g. vaccinations, required testing, etc.) and communicating with various OSU offices to coordinate billing and payment for the students. Jaclyn's duties also include VISA processing for international employees, monitoring work eligibility status, providing support for VISA changes and

coordinating with OSU for F and J VISA holders. Jaclyn also assists with the training and education at The Research Institute.

Look Who's Coming to Visit

January

Shanti Lal Bohjwani, MD Pakistan

February

S. Senthilkumaran, MD India

March

C. Viswanathan, MD India

Maria Garcia-Hidalgo, MD Spain

Jubril Sanusi, RN Nigeria

Ngozi Uche, RN Nigeria

Xiao Wen Wang, MD China

July

W. Tessema, MD Ethiopia

Luciana Martins, MD Brazil

Ricardo Martins, MD Brazil



Henrietta Lacks Contribution to Science

Many of you are very familiar with HeLa cells, but how many of us know the story behind the origin of the cells? The name HeLa is due to a Black woman called **Henrietta Lacks**.

Mrs. Lacks died in 1951 at the young age of 31 of cervical cancer in the Colored Ward at Johns Hopkins Hospital in Baltimore, Maryland. It was the only major hospital in the area that would treat a non-white person. Her physicians gave tissue samples to a pathologist who successfully grew them, making them the first human cells to grow in tissue culture. Since then they have been called 'immortal'.

For the past 60 years, HeLa has continued to reproduce, resulting in research for medical advances which include the polio vaccine, chemotherapy, gene mapping and IVF to name a few. HeLa cells traveled on the first missions to space to test the effect of zero gravity on human cells. According to Rebecca Skloot, author of "The Immortal Life of Henrietta Lacks", if they were placed on a scale, "they would weigh 50 million metric tons".

Nobel Prizes have been awarded to scientists for *Physiology or Medicine* (2001) and *Chemistry* (2004). In 2008, two prizes were given: one for *Chemistry* and one for *Physiology or Medicine*. All of the research was done with the help of HeLa cells. It is interesting to note that the 2008 award for *Physiology or Medicine* was to Harald zur Hausen for his 'discovery of human papilloma viruses causing cervical cancer'. The Human Papilloma virus 18 (HPV 18) DNA detected in the original tumor samples from

Henrietta Lacks, as well as in many subsequent cervical cancer biopsies from others, has been shown to have caused her cancer which resulted in her death.

There is no record to indicate Mrs. Lacks' permission to use her tissue. In the 1950s, informed consent was not an issue because it was unheard of. However, in 1954 a mass production of HeLa cells was begun as a for-profit venture.

Mrs. Lacks' family was unaware of any of this until they received a call in the 1970's from a scientist wanting to test the family. As recently as 1976, a paper was published that included genetic markers found in Mrs. Lacks' DNA and her husband and five children. They were identified as "Henrietta", "Husband", "Child 1", "Child 2", etc. Many years later, Henrietta Lacks' medical records were given to a journalist without consent by her family. A book was produced in which the writer described the details of the autopsy in graphic detail.

A myriad of questions have arisen regarding patient confidentiality, consent, *communication* of informed consent to a lay person, *when* to ask for informed consent, payment for bio specimens and the list goes on and on. It has opened a Pandora's Box of questions with few answers and no end in sight.

For sixty years, HeLa cells have been growing in various research laboratories around the world, helping scientists make ground breaking medical discoveries and at the same time, raising unresolved ethical issues not only for these cells, but for others whose DNA may have been used for purposes unknown to them. It will take many years in the judicial system to sort it all out, if it ever is.