



## HEALTHY NUTRITION & LIFESTYLE IN RURAL ARMENIA

(Arpi Simonian Healthy Nutrition and Lifestyle Project)

**T**o improve family and community knowledge, attitude and practice in healthy nutrition and lifestyle, the Center for Health Services Research and Development conducted community-based training of trainers (TOT) in seven villages of



R. Grigoryan, CHSR, AUA and the community nurse in Voskehask, Shirak Marz

Shirak and Tavush marzes of Armenia with the financial and technical support from Arpi Simonian. The remote and border villages with no practicing physicians were selected, as villages with the greatest need for healthy nutrition and lifestyle intervention. The project targeted active female representatives of

village communities (teachers, nurses, village mayor office staff, and socially active villagers) who would successfully disseminate information within their communities. Overall, 19 TOT sessions were conducted in May-July 2010 for 274 women. Each TOT session used interactive methods, including group discussions, exercises and role-plays. Each participant received education materials for personal use and dissemination, including Arpi Simonian's book "Healthy Nutrition and Lifestyle".

Surveys with women prior to and three months after the TOT showed substantial improvements in knowledge, attitude and practice in healthy nutrition and lifestyles as a result of the trainings and effective dissemination of health information by the trained women.

The success of this program calls for expansion to other villages and adaptation and testing in urban areas. Some topics, such as prevention of botulism, should be more emphasized given that storage and preparation of consumed food in Armenia is mainly done within the household. Although the attitude of women about opposing to



N. Truzyan, CHSR, AUA and women of Tsaghkavan, Tavush Marz

smoking in the households and in the presence of children was positive, men were the large majority of smokers and made the decision concerning smoking in the household. Resolving these issue requires empowering women and targeting men for future programs.



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# GRADUATING COHORT OF 2011 (PART I)

## MPH Integrating Experience Project Brief Abstracts

### **Karen Adamyan; Risk Factors for Placental Abruption: a Case-Control Study**

Placental abruption (PIAb) complicates about 1% of pregnancies and is a leading cause of vaginal bleeding in second half of pregnancy, and an important cause of perinatal mortality and morbidity. The case-control study demonstrated that patients who reported three and more days of first trimester vaginal bleeding showed an increased risk of placental abruption.



Neeraj Pandey, MPH 2011

screening data for specific age groups, performed at primary health care facilities according to the Ministry of Health order, is the most feasible way of obtaining anemia prevalence in 9-12 months old children. This study is the first conducted in Armenia that explores the obstacles for well-functioning anemia surveillance system and provides recommendations for a new or improved surveillance system.

### **Anna Ghazaryan; Main Reasons for Increased Cesarean Section Rate in Yerevan: Knowledge, Attitude, and Practice Analysis**

The rate of cesarean sections (CS) exceeding the 15% recommended by the World Health Organization have adverse effects on maternal and neonatal morbidity and mortality and is financially inefficient. The CS rate increased from 7.2% to 18.6% in Armenia in the last decade. The qualitative study suggested the primary causes of increased CS rate: lack of explicit clinical indications for CS, increased number of medical indications, increased morbidity, and maternal requests for CS, and physicians' financial incentives. Educational programs, changes in standards and current guidelines might play an important role in reducing the unnecessary CS rate.

### **Meri Tadevosyan; Mode of Delivery: a Pilot Cost Analysis**

The Ministry of Health of Armenia implemented the Obstetric Care State Certificate Program in 2008 to provide free obstetric services to pregnant women. From 2008 to 2010 the rates of CS in Armenia increased from 15.0% to 18.6% which might be either a result of OCSC Program or just a historical trend. The current official reimbursement for Cesarean Section (CS) within a hospital is about 1.6 times higher than the reimbursement for Vaginal Delivery (VD). The hospital based cost accounting cross-sectional pilot study found that the obstetrician-gynecologists, the main decision makers for the mode of delivery, were reimbursed 11.4 times higher for CS than for VD. This finding suggests that the increasing rates of CSs in secondary level of specialization maternity hospitals could be at least partially related to bigger financial incentives for performing CS.



Laylee Moshiri, UNICEF Representative in Armenia

### **Marianna Koshkaryan; Assessment of Current Surveillance System of Anemia among Children 9-12-months old in Armenia**

Anemia is a public health problem in Armenia. About 67.9% of children 9-11 months old suffer from anemia. The specific aims of the study were to explore (1) perceptions of health care workers and administrators about anemia screening and (2) the chain of information flow on anemia. Given the limited resources of the health care system, the use of anemia



### **Elina Shahumyan; Asthma and Physical Activity: Maternal Attitudes and Beliefs towards Physical Activity of Asthmatic Children in Yerevan, Armenia**

Regular physical activity for children with chronic asthma is beneficial. However, parents, sometimes physicians, believe that asthma is a barrier to exercise. The aim of this research was to study the associations between maternal beliefs and attitudes towards the child's physical activity and the level of physical activity of the asthmatic child in Yerevan, Armenia. The study found that some mothers restrict physical activities of their asthmatic child based on misbeliefs and wrong attitudes towards physical activity, independent of the severity of asthma. The study recommended to raise awareness among mothers and some physicians about the beneficial effects of physical activity for asthmatic children.

### **Lilit Babajanyan; Perioperative Risk Factors and Outcomes in Children with Congenital Heart Diseases in Armenia**

Congenital heart disease (CHD) is one of the three leading types of birth defects causing perinatal mortality in Armenia. The study describes the perioperative risk factors and outcomes of congenital heart disease surgery at Nork Marash Medical Center (NMMC) in Yerevan, Armenia to benchmark NMMC's performance against international peers and guide quality improvement efforts. Risk Adjustment for Congenital Heart Surgery-1 method can be used to predict CHD surgical mortality at NMMC. Higher RACHS-1 score and lower weight in this study clinically and statistically predicted significantly poorer outcome. The crude operative mortality at NMMC was comparable to the results from other international studies.

### **Yeva Sahakyan; Gender Differences in Patients with Percutaneous Coronary Intervention: the Armenian Experience**

Coronary artery disease (CAD) is the leading cause of morbidity and mortality worldwide. Scientists are still debating whether women benefit from invasive treatment strategy of CAD as men do. This study assessed gender differences in perioperative characteristics, 3-year event-free survival from major adverse cardiac and cerebrovascular events (MACCE), and quality of life (QoL) in patients who underwent percutaneous coronary intervention (PCI). The observational, retrospective cohort study found that diabetes status and gender strongly interact with MACCE. In non diabetic population women have significantly better long-term survival than men, while the opposite was observed in diabetic population.

Full project reports are available at [www.auachsr.com](http://www.auachsr.com)



# FIGHT FOR TOBACCO FREE ARMENIA CONTINUES

## World No Tobacco Day - 2011

On the occasion of the World No Tobacco Day on May 31, the CHSR, in collaboration with the AUA Student Council and Coalition for Tobacco-Free Armenia, organized a walk to raise public awareness about the health of secondhand smoke. The advocates for non-smokers' rights walked from the American University of Armenia to downtown Yerevan carrying banners "It's our right to live without tobacco smoke," "Stop smoking in public places," and others. They engaged the residents of



Yerevan in face-to face dialog persuading smokers not to smoke next to non-smokers and encouraging non-smokers to protect their right for smoke-free air at worksites and other public places. The participants of the walk distributed flyers with information on the legislation that protects from tobacco smoke exposure at work and other public places, and the hot-line number to motivate non-smokers to protect their rights. The walk was organized within the tobacco control awareness campaign supported by the Open Society Foundations-

## International Symposium on Smoke-Free Worksites

Within the framework of the 5th European Conference on Tobacco or Health (29-30 March 2011, Amsterdam), the CHSR in collaboration with the Institute for Global Tobacco Control at Johns Hopkins Bloomberg School of Public Health (IGTC/JHSPH) organized a symposium on "Implementing Smoke-Free Worksites in Central/Eastern Europe and Central Asia." Drs. Narine Movsisyan (CHSR) and Frances Stillman (IGTC/JHSPH) organized and led the symposium to share experience and disseminate the results of a multiyear collaborative



N.Movsisyan, D.Petrosyan, A.Harutyunyan, CHSR, AUA and F.Stillman IGTC, JHSPH



Participants of the Symposium

effort on modeling smoke-free worksites in Armenia with colleagues from Serbia, Uzbekistan, Georgia, and other countries in the region. Drs. Diana Petrosyan and Arusyak Harutyunyan were actively involved in this event and creation of the network to promote regional cooperation in the field. Research for International Tobacco Control of the Canadian International Development Research Center (RITC/IDRC) and Johns Hopkins FAMRI Center of Excellence in Translational Research generously supported this unique regional research and networking meeting.

## First Smoke-Free Awards Ceremony

The first Smoke-Free Awards Ceremony launched on December 14, 2010 at the Akian Art Gallery of AUA. The Ceremony aimed to support and promote smoke-free worksites in Armenia. The facilities were selected based on suggestions from the Coalition for Tobacco-Free



R. Grigoryan and D. Petrosyan, CHSR, AUA

Armenia members and verified by spot checks in Yerevan, Gyumri, and Vanadzor. The CHSR organized the event in collaboration with the Coalition for Tobacco-Free Armenia within a broader project "Building NGOs monitoring capacities to support FCTC implementation in Armenia" supported by the American Cancer Society, Cancer Research UK, and Framework Convention Alliance.



The smoke-free award to Yerevan State Puppet Theater

## MPH ALUMNI SUCCESSES



Tatul Hakobyan, MPH, MBA has been appointed to the position of Public Health Advisor in the WHO Regional Office for Europe. He is responsible for management and implementation of public health projects in coordination with national authorities and WHO

respective technical units, he is involved in follow up, monitoring and evaluation, and implementation of health system reforms related to improved delivery of public health services at specific country and multi-country levels.



Gayane Yenokyan MD, MPH, PhD, has been selected as the winner of Circulation's (Journal of the American Heart Association) "Best Paper Award" in the category of Population Science, for the article she co-authored "Prospective Study of Obstructive Sleep Apnea and Incident

Coronary Heart Disease and Heart Failure: The Sleep Heart Health Study." The 2010 award will be presented at the end of Circulation's symposium, "Groundbreaking Studies in the Practice of Cardiovascular Medicine," to be held at the American Heart Association's Scientific Session on November 13, 2011, in Orlando.

## LATEST NEWS



**December 10, 2010:** Dr. Mihran Nazaretyan, Medical Director of the Armenian Bone Marrow Donor Registry made a presentation "A Stem Cell Journey". The presentation was followed by the Donor Drive on December 14 during which members of the AUA community donated blood for testing.



**January 12, 2011:** Dr. Lilit Avetisyan, Head of Communicable and Non-communicable Disease Epidemiology, SHAIE, MOH presented the International Health Regulations and the process of their implementation in Armenia.



**February 23, 2011:** CHS hosted the panel discussion on Healthy Lifestyle in Armenia with representatives from National Assembly, Ministries of Health, Education and Agriculture, and NGOs.

### To learn more

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