When there is no doctor: Use of decision support to produce reliable weight gain in hospitalized newborns in Indonesia

W. Wang1, M. Nieciernko2, H. Teich3, R. Rohsiosumarto1; 1EMAS Jhpiego/Save the Children—Indonesia, Kuningan, Jakarta/ID, 2Boston Children’s Hospital, Division of Emergency Medicine, Boston, MA/US, 3Boston Children’s Hospital, Emergency Medicine, Boston, MA/US, 4RSCM—Neonatal Unit, Jakarta/ID

Background: Globally, malnutrition is responsible for 53% of deaths in children under 5. This proportion is arguably higher among hospitalized newborns. In hospitals, the newborn is isolated from its natural feeding source—the mother—and often too immature or weak to suck. Furthermore, feeding a sick newborn is not intuitive. Doctors who initiate this process often have insufficient knowledge on newborn feeding. The situation is exacerbated in under-resourced settings where there is a scarcity of doctors.

EMAS is a 5-year USAID-funded program, which aims to reduce high maternal and neonatal mortality rates in Indonesia by increasing the quality of medical services in 150 hospitals and 300 health centers. At year 3, EMAS is targeting neonatal nutrition and introducing the use of decision support tools to directly improve neonatal feeding practices. Decision support is a quality improvement methodology that directs users toward evidence-based choices—in checklist form—at the time of vital decisions.

Structure/Method/Design: September to December 2013, teams consisting of one U.S. volunteer pediatrician and two Indonesian general doctors mentored staff at eight hospitals on neonatal nutrition for a period of 10 days. Using patient records and an electronic scale, baseline data on nutrition status of the neonates were obtained. With the permission of hospital pediatrics, perinatology nurses took responsibility for nutrition management. The mentoring teams taught nurses how to use the new management. The mentoring teams taught nurses how to use the new

Summary/Conclusion: Two of the eight hospitals chose not to proceed to the intervention stage. Of the remaining six hospitals, prior to the intervention, newborns only received 78% of recommended feed volume (n = 50) and none routine caloric supplementation. Newborns <8 days old had average weight loss of −17.7 g/kg/d (n = 31) (95% CI, −23.544 to −11.076). Newborns >7 days old had average weight gain of 1.38 g/kg/day (n = 23) (95% CI, −2.27 to 5.051). Following the intervention, newborns <8 days old reduced weight loss to −5.4 g/kg/d (n = 27; P < 0.01). Newborns >7 days old increased weight gain to +1.3 g/kg/day (n = 21; P < 0.01). The latter rates are considered normal even for healthy newborns. The average weight of patients in this study was 2191 grams.

New media sources and women’s health in Armenia:

Determining relevant health information sources for women in Armenia

H.Z. Wright1, S.R. Wright2, C.T. Lence3, Y. Cheng3; 1University of Utah, Division of Public Health, Salt Lake City, UT/US, 2University of Utah, MPA Program, College of Social and Behavioral Science, Salt Lake City, UT/US, 3University of Utah, Department of Pharmacotherapy, Salt Lake City, UT/US

Background: A mother’s level of education is an important predictor of child health, making women a crucial source of health information and cues to health behavior. Utilization of health care services is very low among Armenian women, and it is not known where these women obtain a significant amount of health information.

This study’s purpose is to identify the principal health information sources (HIS) for women in Armenia, assess perceived importance and trustworthiness of each source, determine preferences, and provide insight to possibly improve effectiveness of media-based public health interventions.

Structure/Method/Design: Quantitative data was collected from a cross-sectional survey in Armenia over a 2-week period from June 19 to July 4, 2012. Face-to-face intercept interviews were conducted among 225 women, with ages ranging from 18 to 74, attending regional health centers in five regions in Armenia using a standardized questionnaire administered by an interviewer. Descriptive and regression based analysis of the data was accomplished using Stata statistical software.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Average participant age was 40.12 (SD 14.6). The majority of participants (66%) lived in the city and 68% reported having postsecondary education. The top three current HIS’s were reported as doctor, television, and family. However, participants identified friends, doctors, and family as their top three trustworthy HIS’s, with television only ranking fourth. Out of eight sources, three HIS’s ranked as least important and least trustworthy were Internet, social media, and radio.

There was a significant difference (P = 0.0005) among levels of languages spoken and identifying TV as a HIS. People who spoke Armenian language indicated TV as an important HIS as compared with people speaking Russian and other languages. In addition, for age groups 45 to 65, TV is a preferred future HIS over other age groups, whereas for age group 18 to 30, family is a preferred HIS among other age groups. Among different levels of education, people with postsecondary education had less preference for family as a HIS over people with education up to secondary level. The importance of getting more health information was identified as “very important” by 98.2% of participants.

Summary/Conclusion: The majority of women in Armenia agree that getting more health information is very important. Television is the preferred HIS, chosen over print media, radio, Internet, and social media. As a result of this study it is clear that people in Armenia will benefit from education/outreach programs implemented by health care providers focusing on women and their friends. Implementing programs that utilize television is the most effective HIS for women and families in Armenia.