Annals of Global Health, VOL. 83, NO. 1, 2017
January–February 2017: 3–11

failure of the institutions to address this issue. Interventions aimed at preventing this situation from escalating should include a multi-level and integrated approach such as public education with the aim of increasing awareness and knowledge regarding antibiotic misuse, enforcing regulations regarding antibiotic sale and dispensing and pharmaceutical advertising.

Source of Funding: None.

Abstract #: *LAN.011*

Impact of Integrating FOMENT within a Community-Based Gestational Diabetes Mellitus Health Program in Bangladesh

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Program/Project Purpose: *Background*: Evidence shows that community based GDM (Gestational diabetes mellitus) programs are effective in reducing morbidity in low resource settings. Diabetes mellitus, particularly type 2 diabetes, is now recognized as a major chronic public health problem in Bangladesh. Low socio-economic conditions, lack of knowledge related to nutrition and proper pregnancy planning and care are the possible barriers to effective pregnancy outcomes for women with diabetes. We describe an innovative intervention strategy for Bangladesh, and demonstrate how promotion of knowledge about GDM can be effectively integrated into a community based GDM program. Overall findings of the projects which were implemented for GDM in Bangladesh suggest that the agencies desired more culturally specific resources.

Objectives: 1) Identify potential programming opportunities to link GDM services within a community based health program. 2) Describe a model of an integrated GDM program in low resource settings. 3) Describe new approaches for supporting organizations for effective and efficient dissemination of knowledge.

Structure/Method/Design: *Interventions:* Intervention priorities include health policy, community based GDM services, and a FOMENT approach in the northern part of rural Bangladesh. The major interventions are: 1) Pre-pregnancy counseling about the risks associated with unplanned pregnancies and poor metabolic control, 2) Screening for diabetes before and during pregnancy which certainly initiate early steps in management, 3) Ensuring access to essential medications, self-management education and information for pregnant women with GDM, 4) Training of health care professionals in the identification, treatment, management and follow up of GDM, and 5) Life style management through BCC.

Outcome & Evaluation: *Expected results:* The results of the intervention would identify its effectiveness. The intervention has the potential to substantially reduce maternal morbidity and ultimately prevent maternal mortality throughout the country. Thus, the outcomes of the study would be highly relevant for policy changes regarding GDM prevention, in Bangladesh specifically as well as in other similar settings.

Going Forward: *Conclusions:* This innovative model can be effectively replicated in low resource settings in South Asia and Africa where there is a need for community-based GDM services.

Source of Funding: None.

Abstract #: *LAN.012*

Dietary Exposure of Pregnant Women in Suriname to Pesticides in Produce

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Background: National pesticide policies in Suriname are lacking and minimally enforced. In 2015, 1.8 million kg. of pesticides were imported. Data from the Netherlands on imported Surinamese produce (2010-2015) showed some samples exceeded maximum residue limits (MRLs) of the European Union (EU). Pesticide exposure has been associated with neurological- and neurobehavioral disorders. Pregnant women and children are especially vulnerable. The Caribbean Consortium for Research in Environmental and Occupational Health will assess exposure to select pesticides in 1000 mother/child dyads. This study represents the dietary assessment of a participants' subset.

Methods: Phase I of the study entails a pilot pesticide residue analysis in 9 types of produce. In addition, a comparative analysis was conducted using EU 2014-2015 screening data of similar produce from Suriname. In Phase II, an interviewer-assisted dietary assessment is conducted to examine demographic factors and intake rates of produce. Data analysis will include ascertaining the extent to which these factors and other social determinants of health, e.g. education and income influence produce consumption. The dietary assessment tool is based on NHANES dietary assessments and has been tailored to Suriname. Specifically, in addition to available data on contaminated Surinamese produce, the content was pilot tested to ensure the questionnaire focused on the most frequently consumed items and complied with the literacy levels of the target population.

Findings: Residues in Phase I exceeding EU MRLs in some produce samples included lambda-cyhalothrin (1.08μg/g) in Chinese cabbage (EU MRL 1.00μg/g), endosulfan (0.07μg/g) in Tannia (EU MRL 0.05μg/g) and lindane (0.03μg/g) in Tannia (EU MRL 0.01μg/g). Comparatively, EU samples from Suriname exceeding EU MRLs included carbendazim, chlorothalonil and profenofos in peppers. Endosulfan and lindane are listed under the Stockholm Convention to eliminate/control their use and are banned in Suriname for use on produce. Dietary assessment results will also be presented.

Interpretation: There is an urgency to address environmental policy gaps and the implications of those gaps for food safety and produce export. Dietary assessment findings will inform public health policy and guide advisories to protect pregnant women and children.

Source of Funding: Fogarty International Center of the National Institutes of Health: R24TW009570, R24TW009561, and U01TW010087-01.

Abstract #: *LAN.013*