A comparison of physical environment and health status in urban and rural Bangladesh

Background: Senior undergraduate nursing students travelled to Bangladesh for our public health nursing course. One of our assignments was to complete a comparison community assessment between rural (Manikganj) and urban (Uttara, Dhaka) areas. Community assessment and health perceptions are essential to tracking common illnesses and linking them to potential, preventable, environmental causes.

Methods: Data were gathered using a variety of tactics, including survey, observation and interview with an interpreter. Interviews were mainly conducted of mothers of small children and health care professionals, but also included all available and willing community members. Bilingual IUBAT* nursing students were our interpreters. The survey tool was an adaptation of Anderson and McFarlane's (2008) windshield survey.

Results: Physical conditions in Uttara consisted of building waste contaminating the water supply, constant construction without protective equipment, and heavily polluted air quality. In rural Manikganj, the environment was mostly farmland intermingled with brick factories and latrines, many feeding directly into the water supply. The health concerns most commonly observed in both Uttara and Manikganj were cough, jaundice, wounds, stained teeth, and cataracts. In Manikganj, most of the children looked generally well nourished while malnourished appearances were more common in Uttara. The most frequent illness reported in both locations were: cough, diarrhea, fever, and rash. Headaches, body aches, allergies, and trouble breathing were all repeatedly brought up in interviews in Utara.

Implications: It can be concluded that respiratory issues present in both locations are related to different environmental factors that decrease air quality. The reported diarrhea can also be associated with the contaminated water supply in both places. Fresh food is more available to villagers in rural areas due to the farms, which may be related to the differing amounts of observable malnutrition. Results will be used to develop health education projects by both UVM and IUBAT nursing students.

*IUBAT: International University of Business, Agriculture and Technology