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"Bring your own idea" program

Topic: Sustainability, Environment, and Public Health: Diapering Practices

Suggested faculty:

1. Sarah Garwood, MD, School of Medicine (Pediatrics)
2. Ebony Boyce Carter, MD, MPH, School of Medicine (Obstetrics and Gynecology)
3. Stephanie Attarian, MD, School of Medicine (Pediatrics)
4. Bill Lowry, PhD, School of Arts & Sciences (Political Science)
5. Melissa Jonson-Reid, PhD, School of Social Work
6. Jane Garbutt, MB, ChB, School of Medicine (Pediatrics)
7. Angela Hobson, PhD, MPH, School of Social Work
8. Other Danforth Campus collaborators, TBD

Description of topic:

Over the course of the last 20 years, traditional cloth diapers have evolved from primarily cotton pre-folds, fitteds, or flats with vinyl or rubber covers to polyester stay-dry microfiber materials with breathable polyurethane outer layers. This shift in design to materials that facilitate breathability and moisture wicking has made modern reusable diapers less likely to cause diaper dermatitis than previous cloth diapers. Subsequently, modern reusable diapers are now more accepted in mainstream parenting communities; yet, disposable diapers continue to be the diapering option of choice for most parents in the developed world. Previous life cycle analyses comparing cloth and disposable diapers have been performed in the UK, most recently in 2005 and 2008. These studies were extensive but came with many assumptions that were not standard practice for modern disposable and cloth diapers. Additionally, these studies were heavily industry sponsored which raises questions regarding the objectivity of their results. Moreover, the significant expense of disposable diapers creates a problem for diapering a child in low income families. Food and housing insecurity, healthcare access, and education have held the recent literature spotlight; however, one overlooked issue in the infant and toddler ages is diaper insecurity. When a family cannot afford as many diapers as an infant requires, that family has diaper insecurity or diaper need (DN). In 2013, DN in one city was estimated to impact 1 in 3 low-income families. Currently, none of the federally funded social programs, including WIC and SNAP, provide access to diapers for children receiving benefits. Additionally, attendance at most child-care centers and early intervention programs require families to provide diapers.

Diaper need and the sustainability of the current mainstream disposable diapering practice is an environmental and public health issue that has drawn very little attention in the literature. Cross-campus, inter-disciplinary collaboration on projects such as life cycle analyses of diapering, epidemiological studies of diaper need prevalence, and public health interventions that screen for

diaper need and provide assistance to families with diaper need would be beneficial to the university and the greater St. Louis community. This inter-disciplinary project will bring together researchers and clinicians from the School of Medicine and the Danforth Campus to discuss the many dimensions of this topic, develop a research agenda, and take first steps towards implementation. In addition to addressing the specific topic of diapering, the project will foster networking and communications between the diverse group of stakeholders towards identifying and addressing community health concerns.