Title: Menstrual Hygiene Management in Poor Adolescent Girls: A Comparative Cross-Sectional Study of Chennai and Delhi

BACKGROUND: Poor Menstrual Hygiene Management (MHM) has been found to adversely affect the education and health outcomes of women, thus impeding SDG targets. Each day, almost 800 million women menstruate, yet many face barriers to managing their periods safely, especially in LMICs. Only 12% of India’s women use sanitary napkins while others resort to unsafe alternatives. Inadequate knowledge and access along with stigma surrounding menstruation hinder women from reaching out to improve their menstrual practices.

OBJECTIVES: To understand the problems faced by poor adolescent women, identify and quantify the barriers to good MHM, to undertake a comparative analysis of the factors affecting MHM in the slums of Delhi and Chennai.

METHODS: 305 girls from the slums of Chennai and Delhi aged 11-20 were interviewed through a self-administered questionnaire and FGDs among them and their mothers were conducted. Quantitative analysis entailed bivariate and multivariate logistic regression models. Principal Component Analysis was used to construct MHM based knowledge, cultural restrictions, and empowerment indices. An MHM index was created as the dependent variable.

RESULTS: The knowledge (0.2348), cultural restrictions (0.1016) and the empowerment (0.1738) indices, religion, mother’s education, access to toilet and family size significantly impacted MHM. FGDs revealed that the cultural and social beliefs among people in Delhi and Chennai pertaining to menstruation varied greatly. This study pioneers exploring the relationship between MHM and women empowerment and has found that the girls felt guilty, under-confident and unempowered during menstruation and felt they did not deserve to spend resources to obtain safe absorbents even if they were available.

CONCLUSIONS: Puberty education through mothers and schools is vital and effective. Hardware and software interventions must be context specific: cultural beliefs that shape the acceptability of interventions and the needs of the target population must be considered. Policies must aim to make obtaining absorbent materials easier: women must be educated about safe, low-cost MHM materials; subsidies must be provided for those who cannot afford it; eco-friendly absorbents must be popularized and taxes on absorbents must be removed or reduced; efficient information channels need to be established for their effective delivery.