

The Effects of Comprehensive Reproductive Health Intervention on Reproductive Tract Infections Symptoms, and Management of Menstrual Hygiene: A Mixed Methods Study Among Secondary School Adolescent Girls in Mwanza Region

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Abstract

Poor menstrual hygiene management (MHM) has been implicated in increasing RTI symptoms. The Partnering to Support Schools to Promote Good Menstrual Health and Well-being (PASS MHW) intervention was designed to address menstrual-related challenges among schoolgirls. However, no comprehensive analysis has evaluated its impact on menstrual management practices or its potential influence on reducing reproductive tract infection (RTI) symptoms.

This study examined the effects of a comprehensive Menstrual and Sexual Reproductive Health (MSRH) intervention on reproductive tract infection (RTI) symptoms among adolescent girls and aimed to identify the key predictors of these changes.

This was a mixed-methods secondary analysis of the PASS MHW project that involved surveys from 424 secondary school girls to assess changes in RTI symptoms and menstrual hygiene practices. In addition, 20 in-depth interviews were conducted with subsamples of girls referred for RTI treatment to assess their experience with health care services.

There was a significant postintervention increase in the proportion of schoolgirls using hygienic menstrual products, increasing from 32% to 77% ($p = 0.001$). RTI symptoms presented mixed outcomes: thick, white, clumped discharge decreased from 33% to 26% ($p = 0.026$), while fish-smelling discharge increased from 6% to 16% ($p = 0.001$), with urban participants experiencing a significant increase (OR = 2.15, 95% CI: 1.31–3.52, $p = 0.002$). Younger adolescents reported an increase in genital itching, sores, and rash, with a notable rise in redness or irritation (OR = 0.67, 95% CI: 0.46–0.98, $p = 0.039$). Referral services encounter barriers, including poor service quality, financial limitations, stigma, and issues related to obtaining consent.

The PASS MHW intervention improved the use of hygienic menstrual products but had mixed effects on RTI symptoms. Some symptoms decreased, whereas others increased, especially among urban participants and younger adolescents. Barriers in referral services, including quality, cost, stigma, and consent issues, remain challenges.

Keywords: Reproductive tract infections, Menstrual hygiene practices, School-based comprehensive reproductive health intervention.