

ABSTRACT

Introduction

Menstruation is a natural phenomenon that occurs with sexual maturity of females. Topic of menstruation is a taboo and surrounded with misconceptions. Thus menstrual hygiene management (MHM) is not discussed openly and most female adolescents lack proper knowledge and attitudes on correct MHM practices.

Objective

To assess the level of knowledge, attitudes and practices and determine the effectiveness of an educational and technical skill development intervention applied through female teachers, to improve knowledge on menstruation and attitudes and practices towards menstrual hygiene among adolescent school girls in Kalutara district.

Methods

Phase I - Descriptive cross sectional study.

Component I assessed of knowledge, attitudes and practices of the adolescent girls in grade 10 classes and Component II, knowledge and attitudes among grade 10 teachers. Computed sample sizes were 720 students and 282 teachers. Using multi stage stratified cluster sampling technique, 48 classes were selected from 47 schools with 15 students/cluster and 6 teachers/cluster. Self Administered Questionnaires I (SAQ I) and II (SAQ II) were administered to students and teachers. Component III comprised assessment of 47 schools for availability of supportive environment for MHM.

Phase II - Quasi experimental study.

Intervention (IG) and control (CG) groups with six schools in each were selected purposively based on presence of a supportive environment. Computed sample size was 300 with 15 purposively selected students and one teacher/cluster, altogether total of 20 clusters.

Component I - Educational and skill development materials were developed. Pre and post training assessment were conducted by using SAQ II for teachers in both groups. After pre training assessment, educational and skill development training on preparing detachable sanitary towel holder was conducted in the IG.

Component II -. After the pre intervention assessment with SAQ I for students in both groups, same intervention was conducted on the IG. Post intervention assessment was conducted after six months by using same SAQ I in both arms.

Component III - Evaluation of the effectiveness of intervention package to improvement of knowledge, attitudes, reported practices and activities affected due to menstruation in the intervention group comparative to the control group.

Descriptive statistics for Phase I and inferential statistics for Phase II were applied.

Results

Phase I/Component I – Satisfactory overall, knowledge, and practices among students were 25% (95%CI: 21.9%-28.3%) and 17.3% (95%CI: 14.7%-20.3%) respectively. Proportion with satisfactory attitudes was 67.5% (95%CI: 63.7%-70.6%).

Phase I/Component II - Satisfactory overall, knowledge and attitudes among teachers were 89.3% (95%CI: 85.4%-92.6%) and 89.0% (95%CI: 85.4%-92.6%).

Phase I/Component III - Supportive environment was present only in 48.9% (95%CI:34.9%-63.1%) of the schools.

Phase II/ Component I/IB - Statistically significant ($P<0.001$) increase in overall knowledge and attitude scores were observed among teachers in the IG against CG.

Phase II/ Component III - Statically significant ($P<0.001$) improvement in terms of overall knowledge and attitudes and ($P<0.05$) eleven out of sixteen variables related to practices and all eight variables under activities affected due to menstruation were observed in IG against CG. Ninety three percent of students had prepared the sanitary ware.

Conclusion and Recommendations

The educational and technical skill development intervention on promotion of MH proved effective with a significant positive impact on the knowledge, attitudes, practices and activities affected due to menstruation. Recommendations include improving teaching skills of teachers by incorporating training modules on reproductive health in training courses; improving basic sanitary facilities in schools, in-cooperation of MHM into basic sanitary guidelines in schools and in the school health programme and distribution of “Hand Book” among students. Future research should consider conducting randomized controlled trials to further strengthen the evidence of effectiveness of the intervention.