

ABSTRACT

Background: To eliminate Soil Transmitted Helminthiasis, Bangladesh is conducting Mass Drug Administration Programs since 2008 bi-annually at school level. According to WHO, MDA coverage has to be at least 75% in endemic regions. Despite of all the efforts, MDA coverage for STH is still low. That could be because of lack of proper knowledge of STH and MDA, fear and avoidance of consuming MDA drug among population. School Based Health Education is an easy and cost-effective way to reach all level of population. This study has evaluated the perceptions of stakeholders about MDA program implementation, assessed the knowledge of students regarding helminthiasis and MDA and identified the potential barriers and the way to overcome those to create supportive environment.

Method: It is a mixed method study. Qualitative methods were used to evaluate the perception, barriers and supportive environment based on IDIs and FGDs with key stakeholders and quantitative method to assess the participants' response to SBHE intervention and knowledge of STH and MDA. Three public schools from Khulna district, Bangladesh were selected by simple randomly. 258 students of grade IV were included for baseline survey, intervention and post assessment. Statistical analysis was done by using STATA 13 and thematic analysis.

Result: This study found that community has positive understanding and attitude towards MDA program as well as basic knowledge on STH. Rumor of MDA drugs side effects and insufficient trained man power are the main barriers for the program success. After SBHE intervention urban and rural students' knowledge improved by 64.31% and 13.04% respectively and also MDA coverage increased by 40.08% and 8.69% respectively. Program needs to involve health personnel with teachers to create supportive environment, which is also another way to deal with the rumors.

Conclusion: SBHE intervention improves knowledge, but to make that knowledge effective and sustainable, teachers need to get proper trainings on regular basis. Improved knowledge of the community can increase MDA coverage if we are able to remove the program obstacle like rumors of side effect of the medicine and constraints of skilled human resources.

Keywords: *soil transmitted helminths, mass drug administration coverage, SBHE, perception, barrier, Bangladesh.*