

ABSTRACT

Background: Ensuring the reductions in the transmission of Lymphatic Filariasis (LF) and addressing the compliance of people to mass drug administration (MDA) has led to consider for extra efforts. School-based health education (SBHE) intervention, as an additional strategy for social mobilization was considered to be the most cost-effective strategy which has potential to reach many young people who can act as a messenger to share the message with their family and the wider community. The study assesses the perception of the stakeholders, implementation barriers and supporting environment and assessment of the tailored intervention to successfully bring change in knowledge and practice related to LF MDA.

Methods: As a part of mixed methods study, as many as 572 students were assigned to intervention and control group. A self-administered questionnaire was used to assess their knowledge and practice to LF MDA. Regression analysis and McNemar test were used to see the impact of the intervention. Qualitative thematic analysis approach was adopted for qualitative assessment. Interview and discussion guideline was used to assess the perception, barriers and supportive environment for implementation.

Results: Intervention curriculum played a significant role to increase children's knowledge and practice ($p < 0.001$) compared to the control curriculum. Barriers included budget constraints, human resources deficient, lacking opportunity to conduct practical classes under curriculum and lack of collaboration with parents and supportive school factors, training provision, monitoring and evaluation practice, adequate facilities and equipment, parents' positive attitude, interested teachers and students and priority from program implementers as supportive factors of implementation.

Conclusion: There was need to develop effective program planning practices such as proper financial management, human resources management, training mechanism and efforts to promote practical classes and coordination with parents in achieving the institutionalization and development of intervention. Good learning and supportive school environment appears to be an important component to support implementation. Findings support that SBHE intervention is a feasible and promising intervention for accelerating the compliance towards MDA to eliminate LF.

Keywords: *feasibility, school-based health education, perception, barriers, children*