The “Youth Empowerment Against DHF Project” was initiated since 2003. It aimed to encourage students to realize and aware of surveillance, control and elimination of *Aedes* aegypti mosquito habitats, both at their homes and schools. In Klongthom Neua Sub-District all primary schools were participated in the project. However, there are no any results of the project evaluation. This descriptive study, a survey was employed to assess knowledge attitude and practice of the students under the “Youth Empowerment Against DHF” in three schools under responsibility of the Klongthom Neua health center. All students of grade 4, 5 and 6 were recruited (300 students), finally two hundred seventy students were completed the questionnaires.

The findings reveal that after the intervention of the Youth Empowerment Against DHF Project, the students gained more knowledge (knowledge’s mean score pre : post = 6.93:9.72), the t-test indicated a statistical significant (p value <.001). However, less than half of the students answered correctly about the frequency of cleaning water containers for DHF prevention (e.g. vases, water containers in the bathroom/toilet, base plates of kitchen cabinets). Results showed a statistically significant difference on students’ knowledge and practices on DHF prevention and control between the pre and post training periods (p<0.05). There were statistical significant between sex, age grade and attitude towards DHF prevention and control (p<0.05). To help understand the findings of this kind of research, the quantitative data obtained from questionnaire-based surveys should be integrated with qualitative data from the focus groups discussion, in-depth interview and observations. The recommendation for school teachers and public health officials teaching in schools, given the widespread negative attitudes of students towards DHF prevention, trainers should include in their courses activities that change and improve students’ attitudes and practices; such as, role play, storytelling.