

## **Effect of hand hygiene intervention on the absenteeism of pre-school children in Klang Valley, Malaysia: a quasi-experimental study**

### **ABSTRACT**

**Background:** Absenteeism amongst pre-school children is often due to illnesses such as hand, foot, and mouth disease, acute gastroenteritis, cold and flu, which are easily spread amongst them. This is because of weak immunity and lack of knowledge on proper hand hygiene. This quasi-experimental study assessed the efficacy of an intervention consisting of a hand hygiene education programme, along with digital tools in bringing about a change in behaviour and health conditions amongst pre-school children in Klang Valley, Malaysia. **Methods:** A total of 377 school children, male and female, aged 5–6 years old, participated and were assigned to either the intervention or a control group. During the 2 months intervention period, children in the test group were trained on proper hand hygiene practices and techniques with the aid of the interactive android-based tablets. The numbers of absent days of all the children were recorded for 2 months before the intervention and during the intervention. **Results:** In the test group, there was a 25% increase in the total number of absent days from the pre-intervention period to the intervention period, a much lesser increment observed as compared to that of control group in which the increase was much higher at 89%. Results showed a significant difference ( $P < 0.05$ ) between the absenteeism rates for the test and control group during the intervention period. **Conclusion:** These results suggest that proper education and intervention increase hand hygiene compliance, which may help decrease school absenteeism due to illness; however, a longer study duration may be necessary to evaluate the benefit further.

**Keyword:** Absenteeism; Hand hygiene; Povidone-iodine; Pre-school children