## Hand Hygiene Gone Viral? A Study of Student Involvement in a Social Media Campaign as a Method of Bringing Hand Hygiene to the Masses

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Aim: This study aimed to spread hand hygiene information and promote behavior change throughout a school population and beyond through student development and sharing of a social media (SM) campaign utilizing Facebook and Twitter. Methods: 114 consented high school students participated in an intervention (INT) group, which received education and created material for a SM campaign (SMC). INT assessments included hand washing effectiveness (HWE) and anonymous surveys (weeks 1, 7, and 12) about hand hygiene behaviors and SM. 308 control students (CON) took anonymous surveys (weeks 1 and 12) about hand hygiene behaviors, SM, and reception of the SMC (week 12). School-wide lunchroom hand sanitizer use (LHS) was covertly observed (weeks 1, 7, and 12). School-wide absenteeism due to illness was compared across time against an external control high school. Facebook Insights was used to obtain information on Facebook viewership. Results: INT had significant improvement (p<0.05) in HWE across time (McNemar's test), hand washing before eating (Linear Regression), knowledge of how long to wash hands, and desire to improve hand hygiene (Logistic Regression). 30% of CON viewed the SMC. CON who viewed the SMC improvement than CON. Significant pre-post SMC improvement in LHS occurred school-wide (t-test). The campaign was viewed on Facebook 13,292 times reaching 2806 people. Conclusion: The SMC had a significant impact on student hand hygiene and may be an effective method of communicating with and changing health behaviors among adolescents.