

Developments in Health Sciences

DOI: 10.1556/2066.2020.00011 © 2020 The Author(s)

ORIGINAL RESEARCH PAPER



Effectiveness of a Hungarian peer education handwashing programme in primary and secondary schools

ZS. MOLNÁR¹, L. VARGA¹, G. GYENES¹, Á. LEHOTSKY², E. GRADVOHL¹, Á.J. LUKÁCS¹, R.A. FÜZI³, A. GÉZSI^{4,5}, A. FALUS⁶ and H.J. FEITH^{1*}

¹ Department of Social Sciences, Faculty of Health Sciences, Semmelweis University, Budapest, Hungary

² National Institute of Oncology, Budapest, Hungary

³ Department of Public Health, Government Office of the Capital City Budapest, Budapest, Hungary

⁴ MTA-SE Immune-Proteogenomic Extracellular Vesicle Research Group, Budapest, Hungary

⁵ Department of Measurement and Information Systems, Budapest University of Technology and Economics, Budapest, Hungary

⁶ Department of Genetics, Cell- and Immunobiology, Faculty of Medicine, Semmelweis University, EDUVITAL Foundation, Budapest, Hungary

Received: March 29, 2020 • Revised manuscript received: July 13, 2020 • Accepted: September 29, 2020

ABSTRACT

Purpose: Proper handwashing helps prevent the spread of communicable diseases. The aim of our study was to analyse and compare children's knowledge and skills in hand hygiene before and after school interventions in order to evaluate the effectiveness of our peer education programme. *Materials/methods:* In our longitudinal study, short- and long-term changes in the knowledge, hand-washing skills and health behaviour of 224 lower, upper and secondary school students were assessed. Our measurements were performed with a self-administered, anonymous questionnaire and the Semmelweis Scanner. *Results:* As a result of the intervention, the proportion of correct answers increased significantly both in the short term and in the long run compared to the input measurements, but age differences did not disappear for most variables. There is a difference in the process of learning theoretical knowledge and practical skills. Areas not used for handwashing in the paediatric population are different from those described for adults in the literature. There was no significant difference between the mean scores of the right and left hands. *Conclusions:* There was a significant positive change in both theory and practice of handwashing. In education, emphasis should also be put on long-term retention of theoretical knowledge in age-specific health promotion programmes within the paediatric population.

KEYWORDS

hand-hygiene, handwashing skills, handwashing knowledge, peer education, school intervention

INTRODUCTION

Numerous studies established earlier the associations between handwashing and the prevalence of distinct infections [1, 2]. Person-to-person transmission via hands and contaminated objects plays a key role in the spread of infections [3]. Previous studies investigating the most frequently missed areas in adult population found that right-handed people have more leftsided areas on the dorsal area of the right hand [4–7]. Although handwashing is a simple and efficient method for reducing the risk of communicable diseases, certain viruses and other

*Corresponding author. Department of Social Sciences, Faculty of Health Sciences, Semmelweis University Vas utca 17, Budapest, H-1088, Hungary. E-mail: feith@se-etk.hu

