

ABSTRACT

Aims: To evaluate the effect of social media based oral health promotion programme in improving the oral health among 18-20 year old college students in Chennai city.

Objective: **1.** To assess the level of addiction to WhatsApp mobile application among the College students in Chennai using WhatsApp Addiction Test. **2.** To assess the baseline oral health status of the study population using the Oral Hygiene Index- Simplified by John. C. Green and Jack. R. Vermillion (1964) and Modified Gingival Index by Lobene et al (1986). **3.** To assess the changes in oral health status in the intervention group at first, third and sixth month after oral health education through WhatsApp mobile application. **4.** To assess the changes in oral health status in the control group at first, third and sixth month after oral health education through demonstration and models. **5.** To compare the changes in the oral health status between the intervention and the control group. **6.** To evaluate and compare the mean Knowledge Attitude and Practice (KAP) scores of the study population Pre- and Post intervention.

Methodology: An interventional study consisting of 140 students who met the eligibility criteria and who were willing to participate in the study were selected. Oral health status was assessed using Simplified Oral Hygiene Index (OHI-S) and Modified Gingival Index (MGI). Their oral health Knowledge, Attitude and Practice (KAP), was also assessed using a 22-item self administered

questionnaire, and the level of WhatsApp addiction was assessed using a 20-item self administered questionnaire. Oral health education was provided to all the students using various methods such as lectures, peer teaching and demonstrations using tooth models and other oral health education aids. The participants were allocated randomly into intervention and control group, 70 in each group. Intervention was given to the interventional group during the first, second and third month, through the social networking application called WhatsApp– which aimed at providing oral health education through pictures, videos and text messages to improve the oral health status. Follow up examinations were carried out for both the groups at the first, third and the sixth month using Simplified Oral Hygiene Index (OHI-S) and Modified Gingival Index (MGI) and their oral health Knowledge, Attitude and Practice (KAP) were assessed at the end of sixth month.

Results: The mean OHI-S score in the intervention group reduced from baseline (2.52) to sixth month (0.77) which was statistically significant ($p<0.001$). The mean MGI score in the intervention group reduced from baseline (1.58) to sixth month (0.58) which was statistically significant ($p<0.001$). The mean OHI-S score and MGI score in the control group, reduced from baseline (2.47) to the first month (1.72) ($p<0.05$); but increased during the third (1.88) and the sixth month (2.06). The mean MGI score in the control group, reduced from baseline (1.56) to the first month (1.22) ($p<0.05$); but increased during the third (1.26) and the sixth month (1.39). The percentage change in the Knowledge, Attitude and Practice

score from baseline to sixth month among Intervention group was 170.73%, 73.38% and 60.19% and among the control group was 46.19%, 36.45%, 35.67%.

Conclusion: The intervention given through the social media based oral health programme using WhatsApp application improved the oral health status among the intervention group. Also, the Knowledge, Attitude and Practice about oral health greatly improved among the intervention group when compared to the control group.