2430 Are Participants’ Favorable Perceptions Linked to Better Clinical Outcomes?

Y. ZHONG1, M.K. ROWE1, T. TANAKA2, N. TAKASE3, K. EBISUTANI3, and H.L. JARED1, 1 University of North Carolina, Chapel Hill, USA, 2 Sunstar, Inc, Chapel Hill, NC, 3 Sunstar Inc, Takatsuki Osaka, Japan

A recent clinical trial by Jared et al. reported that 4-week use of novel interdental brush (IDB) systems was highly effective in removing interproximal biofilms and reducing gingivitis. A remaining challenge is to identify factors that may influence motivation for IDB utilization in order to optimize clinical outcomes. Objective: To evaluate whether perceived ease of IDB insertion and IDB effectiveness are positively linked to IDB utilization as measured by clinical outcomes. Methods: A total of 152 participants were randomized into 5 treatment groups: (1) tooth brush (TB) and IDB with active gel, (2) TB and IDB with placebo gel, (3) TB and IDB, (4) TB and floss, and (5) TB only. Clinical measurements evaluating interproximal plaque growth and gingival inflammation were taken at baseline, 2 weeks and 4 weeks. This study focused on the 91 IDB-using participants in groups (1), (2) and (3) who had also completed a questionnaire at the end of the 4th week that elicited participants’ perceptions as to IDB ease of insertion and effectiveness. Results: 90.1% of participants agreed or strongly agreed that the IDB was easy to insert interproximally. A total of 65.9% perceived or strongly perceived that the IDB worked effectively. Mantel-Haenszel analyses revealed no significant heterogeneity across the 3 IDB groups as to perceptions about IDB ease of insertion or effectiveness. Pooling the 3 groups, ANOVA revealed that participants who found the IDB easy to insert or work effectively did not demonstrate significantly lower clinical plaque or gingivitis scores after 4 weeks. Conclusions: Participants’ responses to ease of IDB insertion and effectiveness were not significantly associated with better clinical measurements of plaque and gingivitis after 4 weeks, suggesting that ease of use and perception of effectiveness may be necessary but not sufficient factors in motivating optimal IDB use. Supported by: Sunstar Inc., Japan.

Seq #245 - Plaque Control - Chemotherapeutic and Mechanical
10:15 AM-11:30 AM, Friday, 12 March 2004 Hawaii Convention Center Exhibit Hall 1-2

Back to the Periodontal Research - Therapy Program
Back to the IADR/AADR/CADR 82nd General Session (March 10-13, 2004)