Dentist–Patient Communication on Dental Anxiety using the Social media and Timing in Communication: A Randomized Controlled Trial

Start: 2 April 2018

End: January 3, 2020

The study was designed as randomized, double-blinded, controlled trial. The patients scheduled to undergo impacted lower third molar removal at the oral and maxillofacial surgery clinic at Karadeniz Teknik University were selected by randomly between 2018 and 2020

Before participation, the study procedure was explained, and each patient who wished to participate provided informed consent. The study was approved and registered by the ethics committee of Karadeniz Technical University (approval no: 2020-153) in accordance with the principles of the Declaration of Helsinki and the recommendations of the CONSORT (consolidated standards of reporting trials) guidelines.

Sample size calculation was performed with G*Power (ver 3.1) software according to the previous article (Omezli MM et al[9].) with a 0.60 effect size, alpha error=0.05 and power 90%. After the calculation, the required sample size was obtained as 33 for each group. Regarding the potential data loss, at least 33 patients were recruited for the study in eac group.

Study Design

All impacted right third molar tooth extractions were performed by a single mouth dental jaw surgeon. Post-op recommendations were given to all patients. An antibiotic and an analgesic were prescribed after the operation and only their use was allowed. The evaluation scales (MDAS, STAI, and STAIT) were applied one week before the operation, when the surgical appointment was first arranged and one week after at the follow-up visit. The outcome parameters were recorded by the same clinician fully blinded to patient groups.

The questions directed by patients to their dentist via IQRs have been categorized. Twelve question types were asked in a single Instagram account. Irrelevant questions were not recorded, and answers were given through the Instagram quick replies system.

Explanation to each patient was made understandable and theoretically from the book of Fragiskos

Measurement of Anxiety Levels

The dental anxiety was selected as the primary outcome variable to rate the dentist–patient communication using the social media effectiveness. In the present study, the Spielberger's State-Trait Anxiety Inventory (STAI-T and STAI-S), Modified Dental Anxiety Scale (MDAS) and VAS scales, which provide useful information about patient anxiety and have a positive correlation, were used for a comprehensive assessment of patient anxiety.

Statistical Analysis

IBM SPSS for Windows 17.0 was used in the all statistical analysis (IBM Corp, Armonk, NY). Descriptive statistics were given as median (min-max) for anxiety (MDAS, STAIS, STAIT) and pain scores (VAS), and frequency (%) for age and gender distributions. The distribution differences of age and gender between groups were given by Chi-square tests. In terms of anxiety scores, the comparison between the groups was evaluated with Kruskal Wallis, Mann Whitney U test and Bonferroni correction. Wilcoxon tests were used for paired anxiety scores data in each group. $P < 0.05$ level was considered statistically significant. Bonferroni correction, $p < 0.01$ level was considered significant in binary comparisons.