

The effects of at-home whitening on patients' oral health, psychology, and aesthetic perception

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Background: The aesthetic self-perception and psychosocial impact of whitening is poorly explored in the literature; it is even less clear whether the effect of whitening may influence the psychology or social relations of patients. Therefore, the aim of this trial is to evaluate the impact of an at-home whitening procedure on patients' quality of life. Also, this study's secondary objective is the adaptation and validation of the Spanish version of the OES questionnaire (OES-SP). **Methods:** Fifty eight patients underwent whitening with 10% carbamide peroxide (CP) gel for 1h daily for 3weeks. For these participants, the OHIP-Esthetics, PIDAQ, and OES surveys were applied before, one week after, and one month after the whitening procedure. Oral health-related quality of life was measured using the OHIP-Esthetics survey and the psychosocial impact using the PIDAQ survey. The orofacial aesthetics was measured by OES and validated for the Spanish Chilean context. The treatment efficacy (ΔE and ΔSGU) and data from the OHIP-Esthetics PIDAQ and OES surveys were compared using the Wilcoxon Signed-Rank test. **Results:** The whitening procedure was effective ($\Delta E=5.9\pm 1.8$). The OHIP-Esthetics results were significant when comparing the initial baseline survey prior to the treatment and one week after whitening ($p<0.001$) and when comparing the baseline and one-month results ($p<0.001$). The overall score on the PIDAQ, after one week post-whitening, was separated into factors and all factors were statistically significant ($p<0.03$); the factors for the one-month results were also all statistically significant ($p<0.001$), except the social impact factor. The OES questionnaire had statistically significantly increased scores both one week and one month post-treatment ($p<0.0001$). The reliability, validity, and responsiveness of the

OES-SP were satisfactory. Conclusion: The at-home whitening procedure with carbamide peroxide 10% had a positive effect on patients' oral health-related quality of life, psychology, and aesthetic perception after one month post-whitening. The Chilean Spanish version of the OES showed satisfactory psychometric characteristics to evaluate dental whitening. Trial

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OES

OHIP

PIDAQ

Quality of life

Whitening teeth

tooth bleaching agent

adult

dental procedure

drug therapy

female

health

human

male

middle aged

psychology

quality of life

questionnaire

self care

young adult

Adult

Carbamide Peroxide

Esthetics, Dental

Female

Humans

Male

Middle Aged

Oral Health

Quality of Life

Self Care

Surveys and Questionnaires

Tooth Bleaching

Tooth Bleaching Agents

Young Adult