Objectives: This clinical study was conducted to evaluate initial color improvement and post-treatment color retention for one year following 1-week bleaching with a 10% hydrogen peroxide whitening strip. Methods: 54 adults were equally randomized to a 10% hydrogen peroxide whitening strips or placebo strips. Whitening strips and placebo strips were applied unsupervised to the maxillary teeth for 30 minutes twice daily for one week. Efficacy was measured as L*a*b* color change from digital images at baseline, end of the treatment, 6 months and 12 months post-treatment. Results: At end of treatment, the whitening strip group experienced a highly significant (p<0.001) reduction in yellow of -1.96±0.085 Δb* units versus baseline and -1.75±0.118 Δb* units versus placebo, with similar results noted for L* a* in the study. At 6 months and 12 months post-treatment, the whitening strip group continued to demonstrate highly significant (p<0.001) improvements in tooth color (reduction in yellow of –1.49 and –1.02 Δb* units versus baseline, respectively.) Occurrence of mild tooth sensitivity (62%) and oral irritation (16.6%) were the most common side effects seen with the peroxide strips. However, these adverse events were significantly reduced or recovered within 24 to 48 hours. Conclusion: This placebo controlled clinical trial demonstrated that one-week use of a 10% hydrogen peroxide strip yielded significant tooth whitening without meaningful side effects. Color change retention was continued for 12 months after bleaching.

Objectives: To validate the short form of the Chinese Oral Health Impact Profile (OHIP-14) in a sample of patients attending the Oral Health Consultation Center in Beijing Stomatological Hospital. Methods: During April to June of 2005, patients attending the Oral Health Consultation Center in Beijing Stomatological Hospital were recruited into this study. Each patient received a clinical examination conducted by an experienced dentist. The WHO criteria were used to register decayed, missing and filled teeth. A questionnaire, which included patients' demographic background and the OHIP-14 questions, was completed in a face-to-face interview by two trained interviewers. Reliability was assessed in terms of internal consistency and stability. Construct validity was evaluated based on comparison of the total scores among groups according to: self-perceived and normative oral health care needs, self-perceived general and oral health status, presence of carious lesions and tooth loss. Results: Totally, 505 patients (mean age 43 years, s.d. 6.8) completed the clinical examination and questionnaire. Both test-restore stability and internal consistency, as measured by the intra-class correlation coefficient (0.81) and by Cronbach's alpha (0.90), proved to be adequate. Construct validity of the correlation between OHIP-14 scores and self-perceived general and oral health was confirmed, and the differences in scores of the groups formed according to the selected attributes were significant at values of p<0.05. Conclusions: The Chinese version of OHIP-14 was found to be valid and reliable for use in the Oral Health Consultation Center to measuring oral health-related quality of life of adult patients.