



BACKGROUND

Periodontitis is a chronic, silent inflammatory disease affecting the teeth’s supporting tissues, with a global adult prevalence of 62% (1). Closely linked to systemic health (2), it significantly affects quality of life (3,4). Its development is strongly influenced by modifiable risk factors, such as smoking, poor oral hygiene and limited dental care access and risk indicators, like stress (5,6). The aviation environment adds stressors that may worsen health, relieving high periodontitis rates and reports of barodontalgia and dental emergencies among pilots (7–10). Therefore, maintaining oral health within Air Force medical units is essential for operational readiness, given the vital role of pilot officers in national defense and international missions. This study aims to assess the periodontal status of Portuguese Air Force pilot (PILAV) cadets and examine the impact of their oral health on quality of life.

MATERIAL AND METHODS

This cross-sectional, analytical and observational study was conducted between December 2024 and March 2025 at the Health Unit of Air Base No. 1 in Sintra. During this appointment, a questionnaire was administered regarding sociodemographic information, oral health-related quality of life (OHIP-14) and individual oral health value scale (OHVS), followed by a periodontal evaluation. The periodontal status was diagnosed according to the 2018 classification by the European Federation of Periodontology/American Academy of Periodontology.

RESULTS

A total of 90 cadets were evaluated, 95.6% (n=86) were male with a mean age of 21.1 ± 1.7 years. Periodontal health was observed in 55.6% of participants, whereas 22.2% (n=20) had gingivitis and 22.2% (n=20) had periodontitis, staged as I, II and III (n=10; n=9; e n=1, respectively). All female participants presented either periodontal health or gingivitis. Regarding smoking habits, 16.7% were current smokers, 38.9% were former smokers, and 44.4% had never smoked. In terms of oral hygiene, 87.7% reported brushing their teeth two or more times per day; 34.4% used dental floss regularly, 20.0% occasionally, and 45.6% did not use it at all. Globally, the OHIP-14 and OHVS revealed no statistically significant relationship between participants' periodontal status and their perceived impact of oral health on quality of life or the values they attributed to it (p>0.05).

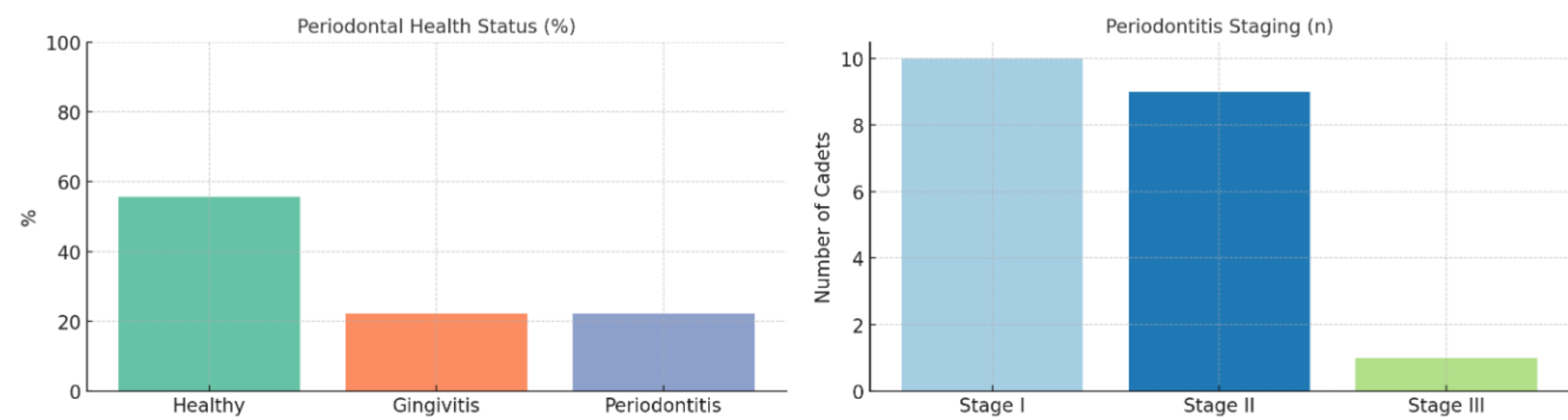


Figure 1. Periodontal Health Status and Periodontitis Staging in PRTAF Pilots

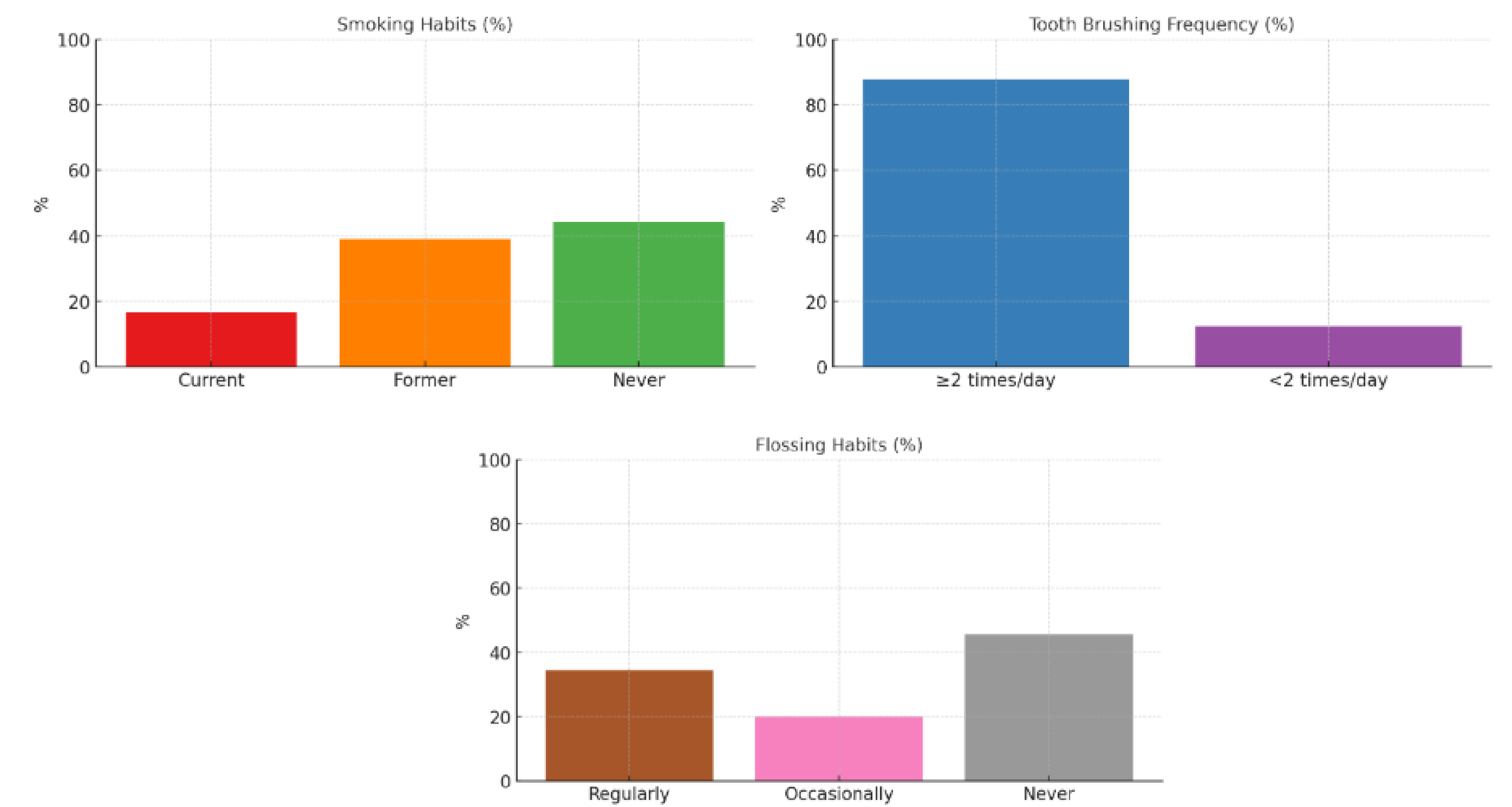


Figure 2. Smoking and oral hygiene habits among PRTAF Pilots

CONCLUSION

This epidemiological study revealed a high prevalence of periodontal disease among PILAV cadets. These findings highlight the need for the implementation of educational and preventive programs within the military setting. Further research is recommended to gain a deeper understanding of the factors influencing oral health in this population.

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