

Understanding Patients’ Perspectives on Peri-Implantitis: Knowledge, Attitudes, and Clinical Experiences in a University Setting

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Aim

This study aims to assess patients' knowledge, attitudes, and experiences regarding peri-implantitis, comparing those treated in the general dentistry department(GP) to those treated in the periodontics department(PERIO) and the prosthodontics department(PROSTH), identifying gaps in patient understanding and evaluate the impact of provider type on patient awareness.

Introduction

- Dental implants are a widely accepted and effective treatment for partial and complete edentulism. However, a significant gap remains between dental implant professionals (scientists and clinicians) and the general public in understanding implant-related inflammatory conditions.
- Many patients undergo implant therapy without fully appreciating its long-term implications and maintenance requirements. Even fewer have a clear understanding of the risks for peri-implant diseases and the behaviors that can help prevent or minimize their progression.

Methods

- Study design: A cross-sectional survey study

- Subject: 306 adult patients who had dental treatment experience before and come exclusively from individual department at University of Michigan School of Dentistry (104 from GP, 100 from PROSTH, and 102 from PERIO) between March 1, 2025, and May 31, 2025.

- The questionnaires covering oral hygiene habits, awareness of implants, peri-implantitis knowledge, etc. Data were analyzed using pairwise comparisons, post hoc analysis, and logistic regression, with significance set at $p = 0.05$.

Results

- While 79% of participants were familiar with dental implants, only 32% were aware of peri-implantitis and its management.
- Patients treated at PERIO or PROSTH received comprehensive dental implant information at twice the rate of those treated at GP ($p < 0.05$).
- Females showed significantly greater awareness of risk factors and treatment options than males ($p < 0.05$).
- Notably, 75% recognized the importance of annual exams for dental implant health, and over 60% reported satisfaction and improved oral hygiene. However, 45% incorrectly believe peri-implantitis only affects the elderly.

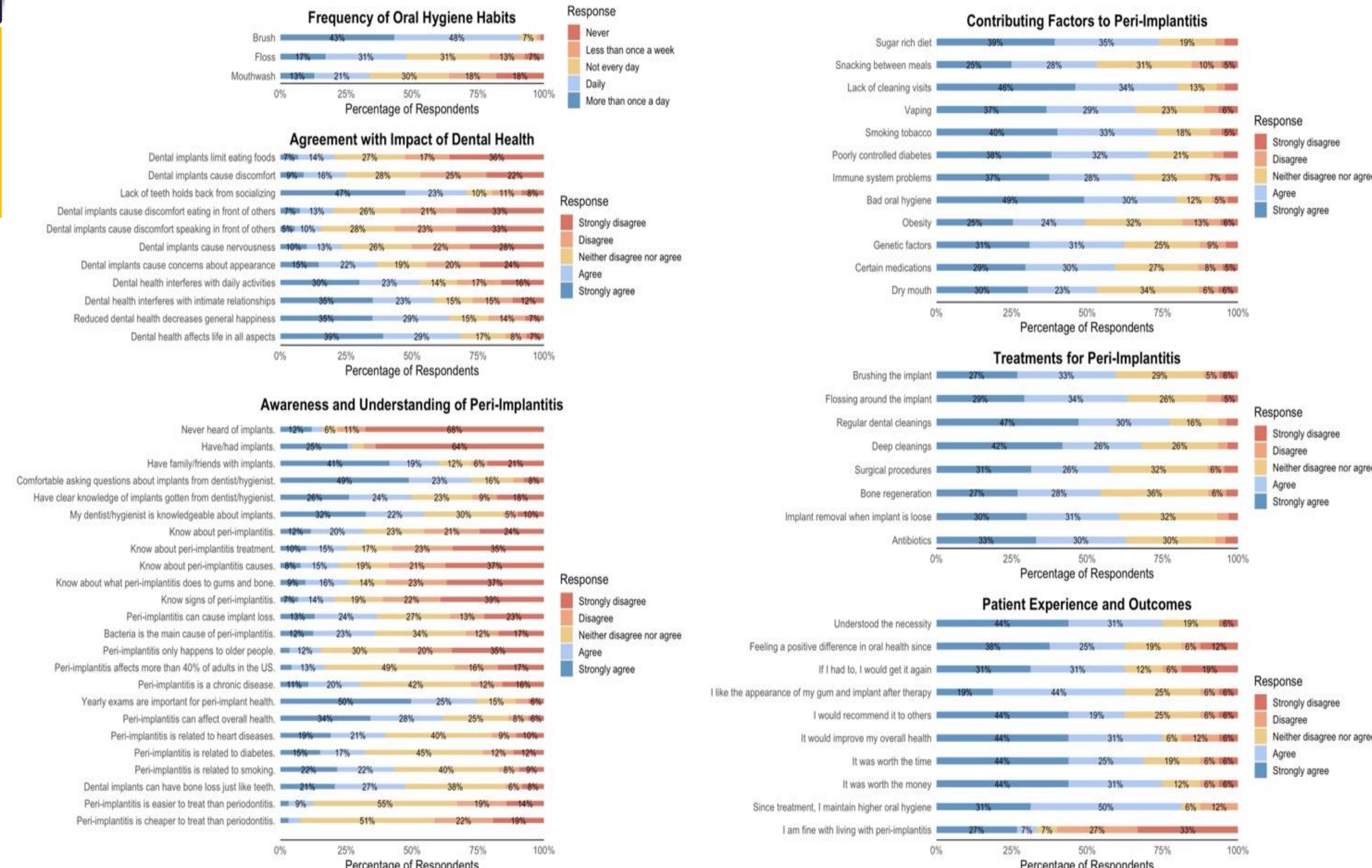


Figure 2. box-and-whisker plot.

- GP had the lowest mean concern index in time to receive dental implants.

- It had a significant difference with PROSTH and PERIO.
- The PROSTH and PERIO had the same mean concern index.

- GP and PROSTH patients had significant difference in year of receiving dental treatment.

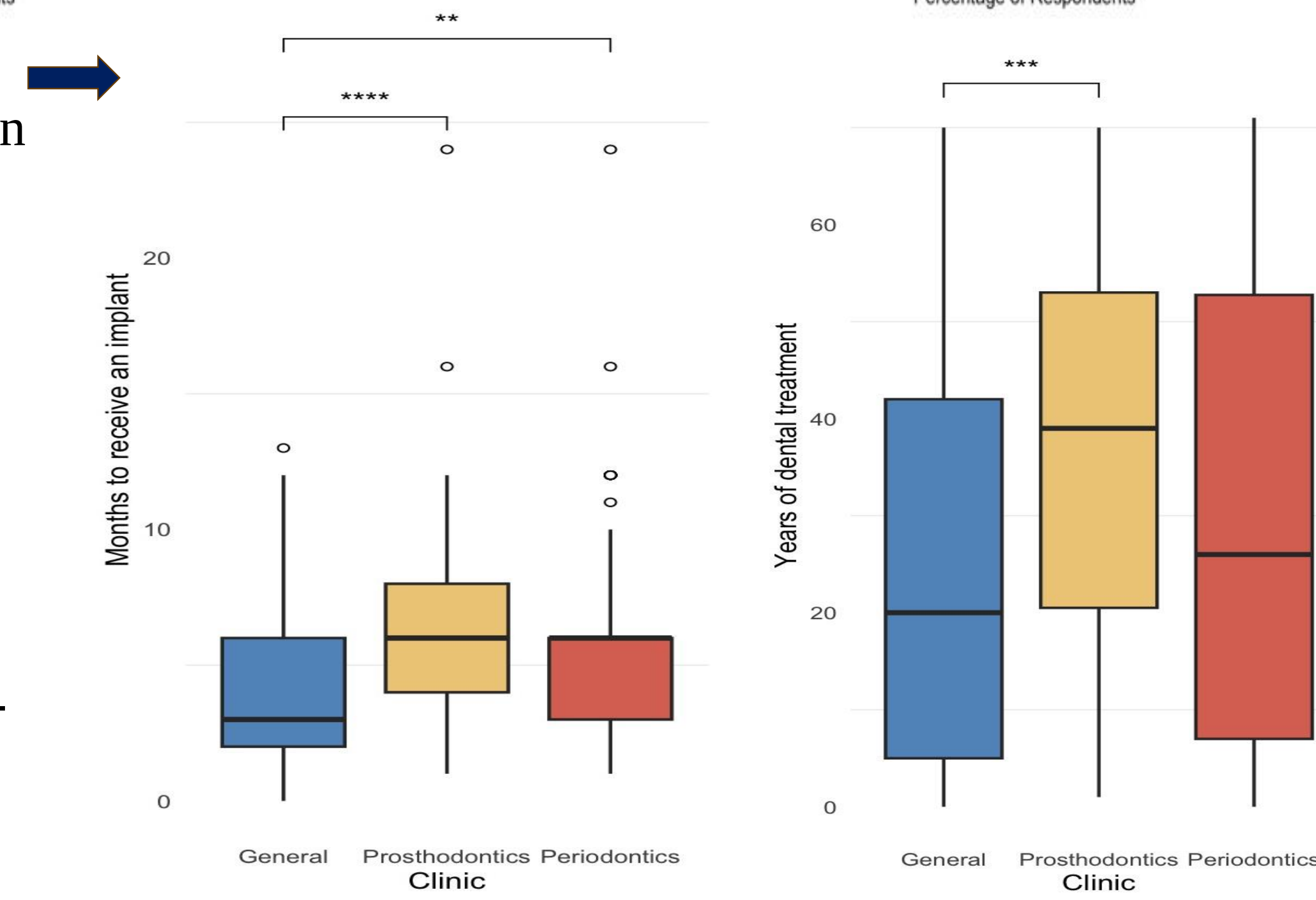


Figure 1. The Stacked Likert Bar Charts. For categories with less than 5% relative frequency, the exact values are not labeled.

Setting (N)	Gender	Age	Healthcare professional	Race	Years of education	Missing teeth	Dental implants
General Clinic (104)	F: 58 M: 45 NA: 1	48.2 7 ± 18.5	9	W: 63 A: 9 B: 10 H: 9 O: 13	15.01 ± 3.11	None: 40 One: 19 Multiple: 41 All: 2 Not sure: 1	Don't have: 76 Already have: 16 Will have: 7 Not sure: 4
Prosthodontics Clinic (100)	F: 59 M: 40 NA: 1	53.5 9 ± 17.1	5	W: 72 A: 6 B: 6 H: 10 O: 6	15.00 ± 5.82	None: 23 One: 23 Multiple: 44 All: 9 Not sure: 1	Don't have: 57 Already have: 25 Will have: 15 Not sure: 3
Periodontics Clinic (102)	F: 52 M: 50	57.6 3 ± 16.9	11	W: 67 A: 11 B: 10 H: 5 O: 9	15.46 ± 3.48	None: 23 One: 11 Multiple: 53 All: 13 Not sure: 2	Don't have: 54 Already have: 31 Will have: 12 Not sure: 5
Overall (306)	F: 169 M: 135 NA: 2	53.1 4 ± 17.8	25	W: 202 A: 26 B: 26 H: 24 O: 28	15.16 ± 4.30	None: 86 One: 53 Multiple: 138 All: 24 Not sure: 4	Don't have: 187 Already have: 72 Will have: 34 Not sure: 12

- Participants’ socio-demographic characteristics, grouped by center. Abbreviations: A: Asian; B: Black; H: Hispanic; NA: Not Applicable; O: Others; W: White.

Conclusion

- Despite widespread knowing about dental implants, there remains a significant gap in patient awareness and understanding of peri-implantitis.
- While most respondents expressed positive attitudes toward their implant care, many lacked crucial knowledge regarding the causes, symptoms, and prevention of peri-implant disease. Enhancing communication strategies and tailoring educational efforts will empower patients to take a more active role in maintaining peri-implant health, ultimately reducing the risk of complications and implant failure.