Title
Assessing patient perspectives and drivers to seek or decline periodontal care in a university-based, post-graduate periodontal clinic

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Assessing patient perspectives and drivers to seek or decline periodontal care in a university-based, post-graduate periodontal clinic

by

Connie S. Oh

THESIS

Submitted in partial satisfaction of the requirements for the degree of

MASTER OF SCIENCE

in

Oral and Craniofacial Sciences

in the

GRADUATE DIVISION
I would like to acknowledge Dr. Mark Ryder for his guidance throughout this project. I would also like to thank Dr. John Dollard for his encouragement, and Ms. Rosemary Flagg for her assistance.
Assessing patient perspectives and drivers to seek or decline periodontal care in a university-based, post-graduate periodontal clinic.

Connie S. Oh, DDS

ABSTRACT

This study assessed patient perception regarding their evaluation and treatment plan in the UCSF Postgraduate Periodontal Clinic (PG Perio Clinic), and the factors driving patient decision making.

The purpose of this study was: (1) to determine how patients were referred to the PG Perio Clinic; (2) to elicit patient reactions; (3) to determine the rate that surgical therapy was initiated; (4) to elicit factors that could improve patients’ experience and treatment plan acceptance.

A study sample of 1,000 recent and current patients of the PG Perio Clinic was selected at random. This sample received a questionnaire including both closed- and open-ended questions about their referral to the PG Perio Clinic, their evaluation, and their treatment plan.

The overall response rate was 18.1%. Females were slightly more represented (54.1%). Respondents tended to be non-Hispanic whites (68.5%) over 60 years old (49.7%). There was a wide and evenly-represented range of reported income.

Respondents were referred to the PG Perio Clinic through a variety of providers, with cost being the primary reason for selecting the Clinic (56.4%). Respondents generally had positive reviews, including personable residents, professionalism, and clear explanations at their evaluation. Negative responses
tended to include more non-resident factors, including overall treatment time, cost, and travel time.

The overwhelming majority of respondents rated their treatment plan as reasonable (90.6%). There was a high rate of treatment plan acceptance (80.7%), with periodontal surgery (including osseous resection and crown lengthening) or implants included in the treatment plan for over 40%.

Among the 19.3% of respondents who declined treatment, most reported their deterrent was cost (65.7%), while another concern was overall treatment time (22.9%). Respondents tended to agree that lowered cost would have lead them to reconsider accepting treatment (54.3%), but 22.3% reported that they would not have reconsidered their decision.

The results indicate that, in general, respondents had positive reactions to their evaluation, resident, and treatment plan. The questionnaire also elicited some surprising complaints and simple issues that could be addressed going forward to improve the PG Perio Clinic for patients.
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INTRODUCTION

Traditionally, periodontal therapy is thought of as three parts: 1) initial therapy, 2) surgical therapy, and 3) maintenance. While most general dentists deliver initial therapy and maintenance in their practice, surgical therapy is, for the most part, exclusively performed by periodontists. Therefore, there is special emphasis in postgraduate clinics to make periodontists-in-training skillful in all aspects of surgical therapy. Part of this education involves teaching residents how to consult with patients about their surgical treatment plans, and to develop methods for high treatment plan acceptance. However, when surgery is recommended as part of a treatment plan, ensuring that patients follow through with their treatment can present a significant challenge. Efforts to improve the rate of treatment plan acceptance must endeavor to understand how patients regard surgical treatment.

Few investigations exist in peer-reviewed journals focusing on patient decisions regarding dental surgery, but more can be gleaned from medicine. Elective surgery can serve as a suitable analogy. Between dentistry and medicine, there seems to be a significant disparity in patient attitudes toward accepting surgical treatment. In a survey of elective surgery (to treat hernias), although 78% of patients reported that they were informed and felt positive that their surgery was an elective therapy, 69% of patients reported that they made the decision to have surgery before even meeting their surgeon.\(^1\)

A commonly cited construct for understanding the patient perspective is the Health Belief Model (HBM) [Figure 1].\(^2\) The HBM has been used as a tool for oral hygiene instruction with some success.\(^3\) It can be applied to periodontal therapy, and surgery in particular, as follows: Perceived susceptibility may be the consequences of losing teeth, having diminished aesthetics, halitosis, etc. Perceived benefits refers to the efficacy of surgery to correct the problem. Perceived barriers include fear of undergoing surgery, fear of post-operative discomfort or altered aesthetics, and the cost of treatment. Cues for action are social cues picked up by the patient; these are more difficult to measure, since periodontics is typically outside of the
vernacular of patients who have not already been referred to a periodontist. With the rise of implant therapy, though, this could change. Health motivation applies to the patient’s “readiness to act” on the problem that warrants surgery. And finally, motivation to change refers to perceived risk of the condition (e.g., periodontitis, perio-prosthetic problems, etc.). The practicing periodontist can use the branches of the HBM to try to understand what dissuades patients from undergoing treatment, and to make targeted changes to shift patient perspectives.

Other patient-centered constructs have also been evaluated with the aim of improving treatment acceptance. It has been suggested that characterizing patient personality (e.g., dominant, influencing, steady, cautious) can modulate communication to increase patient motivation to accept treatment. Some patients respond well to having family members involved in the decision making process. Family support can help patients feel more at ease with the prospect of surgery, and, additionally, their presence can motivate patients to fulfill the expectations of the family and follow the doctor’s treatment recommendation.

The challenge of reliably persuading patients to undergo therapy can be compounded in a university setting. In a study of first-year residents in a teaching hospital obtaining informed consent (again for inguinal hernia repair), it was found that few residents were able to adequately deliver informed consent or address patient questions. In fact, for all parameters measured, less than half of the residents sufficiently met any criteria. Given that the dental model differs in that residents not only deliver informed consent but also largely perform surgeries solo, with the majority of patients completely lucid during surgery, it’s reasonable to expect that patient concerns during treatment plan discussion could lead patients to decline treatment.

This study aimed to assess the drivers of patient behavior when surgery was recommended as part of the treatment plan in a postgraduate periodontal clinic.
MATERIALS AND METHODS

The questionnaire (Appendix 1) was developed to ask patients of the UCSF Postgraduate Periodontal Clinic (PG Perio Clinic) about their evaluation and their impressions of their treatment plan and of the clinic. It consisted of 21 multiple—choice questions and two open-ended response prompts. The questions asked about each participant’s referral source, reason for referral, reasons for selecting the PG Perio Clinic, factors affecting treatment plan acceptance, and socio-demographic data. The questionnaire, cover letter (Appendix 2), and consent form (Appendix 3) were submitted to the UCSF Committee for Human Research (CHR) for review. Upon CHR approval, the active arm of the study was initiated.

One investigator [MR] used a random number generator to select 1,000 participants out of the pool of all patients of PG Perio Clinic aged 18 and over, who have been seen within the last three years. An allocation number was assigned to each of the selected patients, and the corresponding allocation number was marked discretely on the corner of each page of a questionnaire. Each packet sent out also included a cover letter, consent form, and patient’s bill of rights. The cover letter and consent form explicitly informed potential participants that their participation or abstention from the survey would have no effect on any current or future treatment in the PG Perio Clinic.

After the initial mailing, data was collected for eight weeks. A different investigator [CO] entered data, recorded by allocation number, without any identifying information. This investigator [CO] was blinded to the population pool, selection of participants, and patient identifiers. The other investigator [MR] was blinded to data collection and analysis. This study was randomized and blinded. No identifying information was used, apart from the name and mailing address to mail questionnaires to participants. No records were maintained, except for questionnaire allocation number, once responses were received.

Questionnaires in which patients indicated that their treatment plan was limited to nonsurgical therapy
(i.e., scaling and root planing) were excluded from the analysis. Data entry was completed by CO. Each of the multiple choice questions was assigned a specific coded, numerical value, and transferred into Google Sheets, a data management application. Open-ended responses were recorded verbatim. Chi-square and Fisher’s exact tests were performed using QuickCalcs, an online statistics program.
RESULTS

The overall response rate was 18.1%. Females were slightly more represented in the respondents (54.1%) (Table 2). Respondents tended to be non-Hispanic whites (68.5%) over 60 years old (49.7%), and well-educated, with over 80% having attended at least some college, and less than five percent having not completed high school. The marital status of respondents was evenly divided, and the majority reported good health (Table 3). There was a wide range of reported income levels, skewing slightly to the lowest income bracket, with 29.3% of respondents reporting less than $20,000 per year, and 17.7% reporting $75,001+ per year (Table 4).

Respondents were referred to the PG Perio Clinic through a variety of different types of providers, including the UCSF predoctoral clinic (28.2%), non-UCSF general dentists (19.3%), self-referrals (17.1%), friends (16.6%), and the UCSF faculty practice (11.6%; Table 5). Only five percent of respondents indicated that they were referred by another postgraduate clinic within UCSF (e.g., Prosthodontics, Endodontics, Orthodontics). The reported reasons for referral, in order of decreasing frequency, were periodontal disease, recession, implants, missing teeth, loose teeth, and crown lengthening (Table 6).

Cost was the primary reason for selecting the PG Perio Clinic (56.4%; Table 7). When both primary and secondary reasons for selecting the PG Perio Clinic were pooled, program reputation and professional referral were well represented, with 47.1% and 38.8% of the combined responses, respectively (Table 8). Roughly one-third of respondents (31.5%) came to their evaluation seeking a second opinion (Table 9).

The most frequently reported treatment plan component was periodontal surgery (48.1%), followed in order of decreasing frequency by implants, bone grafting, extraction, and soft tissue grafting (Table 10). The overwhelming majority of respondents rated their treatment plan as reasonable (90.6%). There was
also a high rate of treatment plan acceptance among respondents (80.7%), with periodontal surgery (including osseous resection and crown lengthening) or implants included in the treatment plan for more than 40% of respondents.

When data were analyzed using acceptance or declining of treatment plan as the basis for comparison, there were no statistically significant differences between groups on any of the studied criteria (socio-demographic, referral factors, or treatment plan). There was a higher tendency for respondents who declined treatment to rate their treatment plan as “aggressive” (20.0% versus 5.5%; Table 1). Respondents who declined treatment were also twice as likely to report that they did not anticipate needing surgery before they were seen for evaluation (32.4% versus 16.7%; Table 12).

Among the 19.3% of respondents who did not initiate their surgical treatment plan, most reported that their main deterrent was cost (65.7%), while another main concern was overall treatment time (22.9%; Table 13). When asked to indicate factors that would have lead these respondents to reconsider declining their treatment plan, more than half (54.3%) selected lowered cost (Table 14). In descending order of frequency, the other responses were follow-up call (17.1%), follow-up letter (11.4%), sedation (8.6%), and a different resident (5.7%). Eight of the 35 respondents who declined treatment (22.3%) indicated that they would not have reconsidered their decision (Table 15).

Of the open-ended responses regarding impressions of the PG Perio Clinic and their evaluation, respondents had positive reviews, including personable residents, professionalism, and clear explanations at their evaluation (Table 17). The following are representative quotations from responses indicating what participants liked most about their evaluation/treatment:

“Thorough evaluation by my postgrad perio and several supervising docs. I also like how involved in the discussion I was allowed to be. I learned a lot about the problem and the
professionals involved in it.”

“At the time, I recall feeling relieved that my periodontists advocated for financial assistance. [The resident] explained the procedure clearly and all the steps that needed to be taken. [The resident] was caring, patient, kind, and professional. I could not have asked for a better doctor.”

“I felt at ease because I trusted that my care was in good hands.”

“Their accurate judgment and detailed explanation, and not business talk. I can trust their opinion 99.99%.”

“Precise and clear information. Fast action scheduling visits, good availability, friendly and professional approach.”

“Clinic personnel were respectful, interested, and took time to explain the procedure. [They] explained all details, left nothing out, reassured me they would be available.”

“Very thorough, two opinions, clear explanation of condition, took the time to answer all questions. Included my input as part of treatment plan.”

“The doctor was very thorough and had great bedside manner.”

“Very professional and articulate. [I] felt very comfortable with the student doctors. When the students weren’t sure, they asked for help and evaluation.”

“I felt confident in the professionalism of my postgrad doctor and the professors who support
“Residents were extraordinary with work and concern. Faculty were exceptionally wonderful. The hygienist was instrumental and taught me a great deal. I am forever indebted to the clinic.”

In contrast, negative responses tended to include concerns about overall treatment time, cost, travel, and receiving treatment from a resident (Table 18). The following are several responses indicating what participants most disliked about their evaluation/treatment.

“The teacher/consultant was cavalier about my surgery. My comfort and consent didn’t seem important to her.”

“[I did not like the idea of] having a ‘student-in-training’ experiment on you.”

“The professor who oversaw the actual procedure was unprofessional, rude, and disrespectful to me and the resident.”

“[I was] afraid to be worked on by a student. Plus, I’ve heard they do the procedure much slower because of inexperience and because of monitoring by professors.”

“Few visits before actual treatments. I’m a low income person and that cost so much for visits and transportation (BART, bus).”

“Lack of communication with the student program. I see UCSF as one entity, not the 2nd floor, 3rd floor, 4th floor independently, sending no back and forth.”

“They are students and some have no experience at all. They practice on you.”
“They recommended surgery so they could practice and train at my expense when surgery was not necessary. This I later confirmed with a second opinion from another dentist. Also, their scientific/clinical thought process was flawed.”

“The solution I was given for home care had a side effect that I wasn’t warned about (teeth discoloration).”

“Not enough hand washing.”

“When I had surgery, the attending doctor to the anesthesiology would not allow [the resident] to administer enough anesthesia to make me comfortable. I was crying and shaking through the entire procedure.”

“[I did not like] how my postgrad treated me.”

“The waiting took several minutes to speak to the financial assistance expert. This took time for both the periodontist and me to wait outside her office. I did not mind the waiting as much as I was annoyed with taking my periodontist’s valuable time.”

“Many things: 1) evaluation faculty was different than the faculty on surgery day. 2) faculty on surgery day changed the technique of surgery on the day of surgery (it was supposed to be FGG; they changed to CTG). The surgery failed and on post op days I was never seen by the same supervisor. Every day [there was] somebody different with some different opinions. I had to go to faculty clinic and do the surgery again.”
“I had one procedure I felt unnecessary (frenectomy). I felt as though I was filling out a required procedure for the student’s graduation.”

“Dental chairs very uncomfortable, and no nitrous.”
DISCUSSION

The principles that can be extrapolated from this study are limited by the study size. The response rate of 18% is on par with other questionnaire-based studies. There was a non-statistically significant inverse relationship between reported income and response rate. This same relationship was observed in a similar study on treatment acceptance in another postgraduate periodontal clinic. As treatment cost was by far the primary driver for the population pool to seek treatment at the UCSF PG Perio Clinic, this relationship suggests that a higher response rate may be anticipated in a private practice setting.

The non-responders pose a challenge because of the majority of the questionnaire responses cannot be determined from patient records. The influence of demographic and other variables may have a major impact on the interpretation of the results. Some of this data could be recovered in further investigation (i.e., the percentage of patients in a given age range who accepted or declined treatment.) In addition, future studies in the PG Perio Clinic could benefit from efforts to improve response rate and number of respondents, such as follow-up reminders, a small remuneration for participation, or a larger cohort.

Another limitation in the design of this study was that only English-language questionnaires were made available. Three envelopes were returned with notes from family members of the intended recipients indicating requests for questionnaires in Spanish, Cantonese, or Vietnamese. Unfortunately accommodations could not be made for non-English literate patients, although this population could likely offer additional insights.

On the part of patients who wavered or started treatment elsewhere, it is well established in elective surgery that patients will seek the performance data for their surgeon. While such data would be discouraging for inexperienced residents, it may be more helpful to frame procedures in terms of their
predictability in the literature, and to emphasize the ability of faculty to facilitate treatment.\textsuperscript{8}

While most of the respondents who declined treatment also did not pursue treatment with any other providers, a small minority did. Five of the thirty-five respondents who declined treatment went on to be treated by a specialist not affiliated with UCSF (Table 16). Given that the specialist fees for most procedures are greater than those charged in the PG Perio Clinic, it seems likely that these respondents declined the PG Perio Clinic for factors like personality differences or distrust of resident skill level, rather than cost.

Although many respondents indicated that they were satisfied by the thoroughness and clarity of explanations in the PG Perio Clinic, studies have indicated that interactive modules can significantly increase the patient’s confidence in the treating doctor and ease anxiety over surgery.\textsuperscript{9} The treating periodontist’s assessment of patient anxiety and management strategies has been shown to have a significant influence of patient response to surgery.\textsuperscript{10}

Both the open- and closed-ended questions elicited some surprising insights. Many of these responses were regarding already-existing services, such as the option for payment plans and the option for sedation. Both are already provided in the PG Perio Clinic, but patients would not be aware of their availability unless explicitly informed by a resident. One respondent indicated displeasure that he/she was not informed that a prescription rinse tends to stain teeth. Another respondent indicated that there was not enough hand washing in the clinic.

It seems plausible that patients could find it easier to make such comments via an anonymous questionnaire, rather than in person, particularly if engaged in ongoing treatment. Fortunately, some of these comments can be easily remedied. For instance, the participant complaint regarding staining of teeth is a valid concern; it is a common side effect of chlorhexidine gluconate, a commonly dispensed
prescription in the PG Perio Clinic, particularly to patients who have undergone recent surgery. To address this adverse effect, labels could be affixed to every bottle to remind patients that this is a risk, and that such staining can be easily removed in-office at a subsequent follow-up visit. Such measures would take little time, and cost close to nothing. While the direct effect on treatment plan acceptance would be difficult to measure, these observations are invaluable in pointing out opportunities to improve the overall patient experience in the PG Perio Clinic.

The primary goal of this investigation was to understand how patients select the PG Perio Clinic for potential treatment, and how they decide whether to undergo their surgical treatment plan. While understanding the patient perspective is critical, the larger end goal could be shifted to place it in the context of resident learning. If the goal of postgraduate training is to improve the quality and quantity of opportunities to treat patients, then the results of this study can be divided accordingly.

Most of the points addressed in this study focus on the perceived quality of care on the part of patients. Improving the quantity of opportunities for residents, however, can be assessed more objectively. Such attempts would include increasing the rate that cases that are referred to the PG Perio Clinic from the existing referral pool, increasing the pool of referral sources, and marketing directly to the public to recruit new patients.

The relative under-representation of other postgraduate clinics as a referral source could indicate a significant missed opportunity. Apart from the predoctoral clinic, providers within UCSF are free to refer patients to whomever they choose. Since these patients are already familiar with UCSF and treatment in an educational setting, it is reasonable to assume that such patients would not be averse to periodontal evaluation in the same setting. Therefore, it could be deduced that one cause for the low representation patients from other UCSF postgraduate clinics is that patients requiring periodontal evaluation are being referred to alternative providers (e.g., UCSF faculty periodontics or non-UCSF periodontists). This
scenario merits further investigation.

While direct-to-patient marketing and recruiting both UCSF and non-UCSF referrals were not studied in this investigation, they could both be worthwhile endeavors. In addition to potentially increasing the patient pool at the PG Perio Clinic, such efforts would also benefit residents in learning how to network with other dentists and specialists in a way that could be applied in private practice. This study attempted to better understand the patient experience in the UCSF PG Perio Clinic. While some issues, large and small, were brought to light by this patient survey, this effort should by no means be considered a stand-alone study. Just as the goal of periodontal residents is to improve and evolve during their three years of postgraduate training, so should any standing practice continually strive to do the same, regardless of whether it’s an educational institution or private practice. With minimal administrative costs, studies such as this can serve as a valuable starting point to direct efforts at improving existing infrastructure, and inspire ideas for new areas of development.
REFERENCES


Figure 1: The Health Belief Model

INDIVIDUAL PERCEPTIONS

MODIFYING FACTORS

LIKELIHOOD OF ACTION

Perceived susceptibility to disease "X"
Perceived seriousness (severity) of disease "X"

Perceived threat of disease "X"

Demographic variables
Sociopsychological variables

Perceived benefits of preventive action minus perceived barriers to preventive action

Likelihood of taking recommended preventive health action

Cues to Action

Mass media campaigns
Advice from others
Reminder postcard
Illness of family member/friend
Newspaper or magazine article
Table 1: Acceptance of Treatment Plan

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<tr>
<th>Response</th>
<th>Frequency (%)</th>
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<tr>
<td>Accepted</td>
<td>146 (80.7%)</td>
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<tr>
<td>Declined</td>
<td>35 (19.3%)</td>
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n = 181
<table>
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<tr>
<th>Demographic Variable</th>
<th>Total Sample (n = 181)</th>
<th>Accepted Treatment Plan (n = 146)</th>
<th>Declined Treatment Plan (n = 35)</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Female</td>
<td>98 (54.1%)</td>
<td>82 (56.2%)</td>
<td>16 (45.7%)</td>
</tr>
<tr>
<td>Male</td>
<td>83 (45.9%)</td>
<td>64 (43.8%)</td>
<td>19 (54.3%)</td>
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<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Ethnicity</strong></td>
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</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>124 (68.5%)</td>
<td>104 (71.2%)</td>
<td>20 (57.1%)</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>19 (10.5%)</td>
<td>12 (8.2%)</td>
<td>7 (20.0%)</td>
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<tr>
<td>Hispanic/Latino</td>
<td>19 (10.5%)</td>
<td>14 (9.6%)</td>
<td>5 (14.3%)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>14 (7.7%)</td>
<td>12 (8.2%)</td>
<td>2 (5.7%)</td>
</tr>
<tr>
<td>More than 1 race</td>
<td>3 (1.7%)</td>
<td>2 (1.4%)</td>
<td>1 (2.3%)</td>
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<tr>
<td>Native American</td>
<td>2 (1.1%)</td>
<td>2 (1.4%)</td>
<td>0 (0.0%)</td>
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<tr>
<td></td>
<td>chi-sq = 4.418</td>
<td>p = 0.93 (ns)</td>
<td></td>
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<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>61+ years old</td>
<td>90 (49.7%)</td>
<td>74 (50.7%)</td>
<td>16 (45.7%)</td>
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<tr>
<td>41-60 years old</td>
<td>70 (38.7%)</td>
<td>54 (37.0%)</td>
<td>16 (45.7%)</td>
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<tr>
<td>26-40 years old</td>
<td>14 (7.7%)</td>
<td>13 (8.9%)</td>
<td>1 (2.9%)</td>
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<tr>
<td>18-25 years old</td>
<td>7 (3.9%)</td>
<td>5 (3.4%)</td>
<td>2 (5.7%)</td>
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<tr>
<td></td>
<td>chi-sq = 3.293</td>
<td>p = 0.86 (ns)</td>
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ns = nonsignificant for p<0.05

Gender assessed with Fisher’s Exact test for two-tailed P.
Table 3: Marital and Health Information of Respondents

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Total Sample (%) n = 181</th>
<th>Accepted Treatment Plan (%) n = 146</th>
<th>Declined Treatment Plan (%) n = 35</th>
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<tr>
<td>Marital Status</td>
<td></td>
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<tr>
<td>Married</td>
<td>76 (42.0%)</td>
<td>62 (42.5%)</td>
<td>14 (40.0%)</td>
</tr>
<tr>
<td>Divorced/Widowed</td>
<td>54 (29.8%)</td>
<td>42 (28.8%)</td>
<td>12 (34.3%)</td>
</tr>
<tr>
<td>Never Married</td>
<td>51 (28.1%)</td>
<td>42 (28.8%)</td>
<td>9 (25.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>chi-sq = 0.423</td>
<td>p &lt; 0.99 (ns)</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>145 (80.1%)</td>
<td>120 (82.2%)</td>
<td>25 (71.4%)</td>
</tr>
<tr>
<td>Fair</td>
<td>30 (16.6%)</td>
<td>24 (16.4%)</td>
<td>6 (17.1%)</td>
</tr>
<tr>
<td>Poor</td>
<td>4 (2.2%)</td>
<td>1 (0.7%)</td>
<td>3 (8.6%)</td>
</tr>
<tr>
<td>Very Poor</td>
<td>2 (1.1%)</td>
<td>1 (0.7%)</td>
<td>1 (2.9%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>chi-sq = 9.600</td>
<td>p &lt; 0.21 (ns)</td>
</tr>
</tbody>
</table>

ns = nonsignificant for p<0.05
### Table 4: Education, Employment, and Income Information of Respondents

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Total Sample (%) n = 181</th>
<th>Accepted Treatment Plan (%) n = 146</th>
<th>Declined Treatment Plan (%) n = 35</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed college (4 years)</td>
<td>75 (41.4%)</td>
<td>62 (42.5%)</td>
<td>13 (37.1%)</td>
</tr>
<tr>
<td>Completed graduate school</td>
<td>40 (22.1%)</td>
<td>33 (22.6%)</td>
<td>7 (20.0%)</td>
</tr>
<tr>
<td>Did not complete college</td>
<td>36 (19.9%)</td>
<td>24 (16.4%)</td>
<td>12 (34.3%)</td>
</tr>
<tr>
<td>Completed high school</td>
<td>24 (12.3%)</td>
<td>21 (14.4%)</td>
<td>3 (8.6%)</td>
</tr>
<tr>
<td>Did not complete high school</td>
<td>6 (3.3%)</td>
<td>6 (4.1%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>chi-sq = 7.134</td>
<td>p &lt; 0.623 (ns)</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>94 (51.9%)</td>
<td>81 (55.5%)</td>
<td>13 (37.1%)</td>
</tr>
<tr>
<td>Retired</td>
<td>50 (27.6%)</td>
<td>42 (28.8%)</td>
<td>8 (22.9%)</td>
</tr>
<tr>
<td>Disabled</td>
<td>17 (9.4%)</td>
<td>11 (7.5%)</td>
<td>6 (17.1%)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>16 (8.8%)</td>
<td>9 (6.2%)</td>
<td>7 (20.0%)</td>
</tr>
<tr>
<td>Homemaker</td>
<td>4 (2.2%)</td>
<td>3 (2.1%)</td>
<td>1 (2.9%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>chi-sq = 11.172</td>
<td>p &lt; 0.26 (ns)</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; $20,000 per year</td>
<td>53 (29.3%)</td>
<td>36 (24.7%)</td>
<td>17 (48.6%)</td>
</tr>
<tr>
<td>$20,001 - 40,000 per year</td>
<td>50 (27.6%)</td>
<td>43 (29.5%)</td>
<td>7 (20.0%)</td>
</tr>
<tr>
<td>$40,001 - 75,000 per year</td>
<td>46 (25.4%)</td>
<td>40 (27.4%)</td>
<td>6 (17.1%)</td>
</tr>
<tr>
<td>year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>&gt; 75,001 per year</td>
<td>32 (17.7%)</td>
<td>27 (18.5%)</td>
<td>5 (14.3%)</td>
</tr>
<tr>
<td></td>
<td>chi-sq = 8.613</td>
<td>p &lt; 0.22 (ns)</td>
<td></td>
</tr>
</tbody>
</table>

**ns** = nonsignificant for p<0.05
Table 5: Referral Sources

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Sample (%) n = 181</th>
<th>Accepted Treatment Plan (%) n = 146</th>
<th>Declined Treatment Plan (%) n = 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Clinic</td>
<td>51 (28.2%)</td>
<td>41 (28.1%)</td>
<td>10 (28.6%)</td>
</tr>
<tr>
<td>Non-UCSF General Dentist</td>
<td>35 (19.3%)</td>
<td>24 (16.4%)</td>
<td>11 (31.4%)</td>
</tr>
<tr>
<td>Self</td>
<td>31 (17.1%)</td>
<td>25 (17.1%)</td>
<td>6 (17.1%)</td>
</tr>
<tr>
<td>Friend</td>
<td>30 (16.6%)</td>
<td>26 (17.8%)</td>
<td>4 (11.4%)</td>
</tr>
<tr>
<td>UCSF Faculty Practice</td>
<td>21 (11.6%)</td>
<td>19 (13.0%)</td>
<td>2 (5.7%)</td>
</tr>
<tr>
<td>Other UCSF Resident Clinic</td>
<td>9 (5.0%)</td>
<td>9 (6.2%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Non-UCSF Specialist</td>
<td>4 (2.2%)</td>
<td>2 (1.4%)</td>
<td>2 (5.7%)</td>
</tr>
</tbody>
</table>

chi-sq = 6.631 p < 0.881 (ns)

ns = nonsignificant for p<0.05
Table 6: Reasons for Referral

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Sample (%)</th>
<th>Accepted Treatment Plan (%)</th>
<th>Declined Treatment Plan (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 181</td>
<td>n = 146</td>
<td>n = 35</td>
</tr>
<tr>
<td>Periodontal Disease</td>
<td>86 (47.5%)</td>
<td>70 (47.9%)</td>
<td>16 (45.7%)</td>
</tr>
<tr>
<td>Gum Recession</td>
<td>55 (30.4%)</td>
<td>43 (29.5%)</td>
<td>12 (34.3%)</td>
</tr>
<tr>
<td>Implants</td>
<td>55 (30.4%)</td>
<td>48 (32.9%)</td>
<td>7 (20.0%)</td>
</tr>
<tr>
<td>Missing Teeth</td>
<td>35 (19.3%)</td>
<td>26 (17.8%)</td>
<td>9 (25.7%)</td>
</tr>
<tr>
<td>Loose Teeth</td>
<td>23 (12.7%)</td>
<td>18 (12.3%)</td>
<td>5 (14.3%)</td>
</tr>
<tr>
<td>Crown Lengthening</td>
<td>16 (8.8%)</td>
<td>13 (8.9%)</td>
<td>3 (8.6%)</td>
</tr>
</tbody>
</table>
Table 7: Primary Reason for Selecting UCSF PG Periodontal Clinic

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Sample (%)</th>
<th>Accepted Treatment Plan (%)</th>
<th>Declined Treatment Plan (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 181</td>
<td>n = 146</td>
<td>n = 35</td>
</tr>
<tr>
<td>Cost</td>
<td>102 (56.4%)</td>
<td>82 (56.2%)</td>
<td>20 (57.1%)</td>
</tr>
<tr>
<td>Professional Referral</td>
<td>32 (17.7%)</td>
<td>23 (15.8%)</td>
<td>9 (25.7%)</td>
</tr>
<tr>
<td>Program Reputation</td>
<td>29 (16.0%)</td>
<td>24 (16.4%)</td>
<td>5 (14.3%)</td>
</tr>
<tr>
<td>Personal Referral</td>
<td>8 (4.4%)</td>
<td>7 (4.8%)</td>
<td>1 (2.9%)</td>
</tr>
<tr>
<td>Convenience</td>
<td>7 (3.9%)</td>
<td>7 (4.8%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Insurance Acceptance</td>
<td>3 (1.7%)</td>
<td>3 (2.1%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

Chi-sq = 1.390

p < 1.0 (ns)

ns = nonsignificant for p<0.05
Table 8: Secondary Reason for Selecting UCSF PG Periodontal Clinic

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Sample (%) n = 181</th>
<th>Accepted Treatment Plan (%) n = 146</th>
<th>Declined Treatment Plan (%) n = 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Reputation</td>
<td>56 (31.1%)</td>
<td>46 (31.5%)</td>
<td>10 (28.6%)</td>
</tr>
<tr>
<td>Cost</td>
<td>52 (28.9%)</td>
<td>43 (29.5%)</td>
<td>9 (25.7%)</td>
</tr>
<tr>
<td>Professional Referral</td>
<td>38 (21.1%)</td>
<td>30 (20.5%)</td>
<td>8 (22.9%)</td>
</tr>
<tr>
<td>Convenience</td>
<td>17 (9.4%)</td>
<td>14 (9.6%)</td>
<td>3 (8.5%)</td>
</tr>
<tr>
<td>Insurance Acceptance</td>
<td>12 (6.7%)</td>
<td>10 (6.8%)</td>
<td>2 (5.7%)</td>
</tr>
<tr>
<td>Personal Referral</td>
<td>5 (2.8%)</td>
<td>3 (2.1%)</td>
<td>2 (5.7%)</td>
</tr>
</tbody>
</table>

chi-sq = 1.662 p < 1.0 (ns)

ns = nonsignificant for p<0.05
Table 9: Rate of Seeking Second Opinion

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Sample (%) n = 181</th>
<th>Accepted Treatment Plan (%) n = 146</th>
<th>Declined Treatment Plan (%) n = 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>124 (68.5%)</td>
<td>102 (69.9%)</td>
<td>22 (62.9%)</td>
</tr>
<tr>
<td>Yes</td>
<td>57 (31.5%)</td>
<td>44 (30.1%)</td>
<td>13 (37.1%)</td>
</tr>
</tbody>
</table>

ns = nonsignificant for p<0.05

Fisher’s Exact test for two-tailed P evaluation.
Table 10: Treatment Plan

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Sample (%)</th>
<th>Accepted Treatment Plan (%)</th>
<th>Declined Treatment Plan (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 181</td>
<td>n = 146</td>
<td>n = 35</td>
</tr>
<tr>
<td>Periodontal Surgery (i.e., Osseous, Crown Lengthening)</td>
<td>87 (48.1%)</td>
<td>71 (25.7%)</td>
<td>16 (29.6%)</td>
</tr>
<tr>
<td>Implants</td>
<td>83 (45.9%)</td>
<td>70 (25.4%)</td>
<td>13 (24.1%)</td>
</tr>
<tr>
<td>Regeneration or Bone Grafting</td>
<td>50 (27.6%)</td>
<td>45 (16.3%)</td>
<td>5 (9.3%)</td>
</tr>
<tr>
<td>Extraction</td>
<td>47 (26.0%)</td>
<td>38 (13.8%)</td>
<td>9 (16.7%)</td>
</tr>
<tr>
<td>Soft Tissue Grafting</td>
<td>39 (21.5%)</td>
<td>32 (11.6%)</td>
<td>7 (13.0%)</td>
</tr>
</tbody>
</table>
Table 11: Perception of Treatment Plan

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Sample (%)</th>
<th>Accepted Treatment Plan (%)</th>
<th>Declined Treatment Plan (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 181</td>
<td>n = 146</td>
<td>n = 35</td>
</tr>
<tr>
<td>Reasonable</td>
<td>164 (90.6%)</td>
<td>137 (93.5%)</td>
<td>27 (77.1%)</td>
</tr>
<tr>
<td>Aggressive</td>
<td>15 (8.3%)</td>
<td>8 (5.5%)</td>
<td>7 (20.0%)</td>
</tr>
<tr>
<td>Conservative</td>
<td>2 (1.1%)</td>
<td>1 (0.7%)</td>
<td>1 (2.9%)</td>
</tr>
</tbody>
</table>

chi-sq = 7.872  p < 0.16 (ns)

ns = nonsignificant for p<0.05
Table 12: Expectations Regarding Surgery

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Sample (%)</th>
<th>Accepted Treatment Plan (%)</th>
<th>Declined Treatment Plan (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 181</td>
<td>n = 146</td>
<td>n = 35</td>
</tr>
<tr>
<td>“Yes, my referring doctor indicated.”</td>
<td>101 (55.8%)</td>
<td>86 (51.5%)</td>
<td>15 (44.1%)</td>
</tr>
<tr>
<td>“Yes, I had a feeling.”</td>
<td>45 (24.9%)</td>
<td>39 (23.4%)</td>
<td>6 (17.6%)</td>
</tr>
<tr>
<td>“Yes, I spoke with someone (eg a friend) who indicated.”</td>
<td>10 (5.5%)</td>
<td>7 (4.2%)</td>
<td>3 (8.8%)</td>
</tr>
<tr>
<td>“Yes, I researched.”</td>
<td>7 (3.9%)</td>
<td>7 (4.2%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>“No, I was not expecting it.”</td>
<td>39 (21.5%)</td>
<td>28 (16.7%)</td>
<td>11 (32.4%)</td>
</tr>
</tbody>
</table>
Table 13: Reasons for Declining Treatment

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency (%) among participants who did not initiate treatment; multiple responses permitted per participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too expensive</td>
<td>23 (65.7%)</td>
</tr>
<tr>
<td>Treatment would take too long</td>
<td>8 (22.9%)</td>
</tr>
<tr>
<td>Did not want surgery</td>
<td>5 (14.3%)</td>
</tr>
<tr>
<td>Did not feel it was necessary</td>
<td>4 (11.4%)</td>
</tr>
<tr>
<td>Treatment was unclear</td>
<td>4 (11.4%)</td>
</tr>
<tr>
<td>Did not trust resident skills</td>
<td>3 (8.6%)</td>
</tr>
<tr>
<td>Did not like faculty</td>
<td>1 (2.9%)</td>
</tr>
<tr>
<td>Did not like resident</td>
<td>1 (2.9%)</td>
</tr>
</tbody>
</table>
Table 14: Factors that would lead participant to reconsider declining Treatment Plan

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency (%) among participants who did not initiate treatment; multiple responses permitted per participant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 181</td>
</tr>
<tr>
<td>Lowered cost</td>
<td>19 (54.3%)</td>
</tr>
<tr>
<td>Follow-up call</td>
<td>6 (17.1%)</td>
</tr>
<tr>
<td>Follow-up letter</td>
<td>4 (11.4%)</td>
</tr>
<tr>
<td>Sedation</td>
<td>3 (8.6%)</td>
</tr>
<tr>
<td>Different resident</td>
<td>2 (5.7%)</td>
</tr>
<tr>
<td>Would not have reconsidered</td>
<td>8 (22.3%)</td>
</tr>
</tbody>
</table>
Table 15: Respondents who Initiated Therapy with an Alternative Provider

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 181</td>
</tr>
<tr>
<td>No</td>
<td>28 (80.0%)</td>
</tr>
<tr>
<td>Yes</td>
<td>7 (20.0%)</td>
</tr>
</tbody>
</table>
Table 16: Alternative Providers among Respondents

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>28 (80.0%)</td>
</tr>
<tr>
<td>Non-UCSF Specialist</td>
<td>5 (14.3%)</td>
</tr>
<tr>
<td>Non-UCSF General Dentist</td>
<td>2 (5.7%)</td>
</tr>
</tbody>
</table>
Table 17: Most-Liked Responses Regarding Evaluation/Treatment

<table>
<thead>
<tr>
<th>Categorical Grouping of Responses</th>
<th>Frequency of Response n = 181</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendly, Kind, Caring</td>
<td>37</td>
</tr>
<tr>
<td>Professional</td>
<td>33</td>
</tr>
<tr>
<td>Explanation, Clear Communication, Answered Questions</td>
<td>32</td>
</tr>
<tr>
<td>Thoroughness, Attention to Detail</td>
<td>31</td>
</tr>
<tr>
<td>Competency, Expertise</td>
<td>24</td>
</tr>
<tr>
<td>Oversight, Checks, Supervision</td>
<td>16</td>
</tr>
<tr>
<td>Multiple Opinions</td>
<td>12</td>
</tr>
<tr>
<td>Attendings, Staff</td>
<td>11</td>
</tr>
<tr>
<td>Honest, Trustworthy</td>
<td>7</td>
</tr>
</tbody>
</table>
Table 18: Least-Liked Responses Regarding Evaluation/Treatment

<table>
<thead>
<tr>
<th>Categorical Grouping of Responses</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Visits, Overall Treatment Time</td>
<td>21</td>
</tr>
<tr>
<td>Too Expensive</td>
<td>14</td>
</tr>
<tr>
<td>Travel Time, Distance</td>
<td>13</td>
</tr>
<tr>
<td>Bad Administration, Communication, Scheduling</td>
<td>12</td>
</tr>
<tr>
<td>Appointment Length</td>
<td>11</td>
</tr>
<tr>
<td>Painful or Uncomfortable Procedure or Post-Op</td>
<td>7</td>
</tr>
<tr>
<td>Faculty Personality</td>
<td>5</td>
</tr>
<tr>
<td>Resident Personality</td>
<td>3</td>
</tr>
<tr>
<td>Difficulty Parking</td>
<td>3</td>
</tr>
<tr>
<td>Billing Dispute</td>
<td>3</td>
</tr>
<tr>
<td>Incompetency</td>
<td>3</td>
</tr>
<tr>
<td>Resident Inexperience, Experimenting with Procedures</td>
<td>3</td>
</tr>
<tr>
<td>Pushing or Promoting Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix 1: Study Questionnaire

**UCSF Postgraduate Periodontology Clinic Patient Survey**

Dr. Mark Ryder (Director-Postgraduate Program in Periodontology) and Dr. Connie Oh (Postgraduate Resident in Periodontology) are conducting a survey to get your feedback on your recent periodontal care in our Postgraduate Periodontology Clinic.

Your responses are very important for us to develop comfortable and patient-oriented clinical care. You responses will be completely confidential, and no personal information will be shared with anyone. In addition, there are no incorrect responses.

Simply place the *completed* survey in the enclosed self-addressed, stamped envelope and place it in the mail. We appreciate your time and effort in completing the survey.

For each of the questions below, please place an “X” in the box next to your response:

---

### SECTION A

1. **Who initially referred you to the UCSF Postgraduate Periodontology Clinic? (select one)**
   - [ ] UCSF Dental Student
   - [ ] UCSF Faculty Practice
   - [ ] UCSF Resident from another department (Prosthodontics, Orthodontics, Endodontics, GPR, AEGD, Pedodontics, Oral and Maxillofacial Surgery, etc.)
   - [ ] General Dentist not affiliated with UCSF
   - [ ] Another Specialist not affiliated with UCSF
   - [ ] Friend, family member, co-worker, or relative
   - [ ] Yourself
   - [ ] Other (Please Specify): ________________________________

2. **To the best of your understanding, what was the reason for your evaluation? (select all that apply)**
   - [ ] Gum Disease
   - [ ] Loose Teeth
   - [ ] Missing Teeth
   - [ ] Implants
   - [ ] Gum Recession
   - [ ] Crown Lengthening
   - [ ] Other (Please Specify): ________________________________
3. What is the primary reason you chose the UCSF Postgraduate Periodontology Clinic? (select one)

☐ Cost  ☐ Program Reputation  ☐ Dental Insurance Acceptance  ☐ Other (Please Specify): ________________

☐ Convenience/Location ☐ Professional Referral ☐ Personal Referral

4. What is the second most important reason you chose the UCSF Postgraduate Periodontology Clinic? (select one)

☐ Cost  ☐ Program Reputation  ☐ Dental Insurance Acceptance  ☐ Other (Please Specify): ________________

☐ Convenience/Location ☐ Professional Referral ☐ Personal Referral

5. Did you initially seek an evaluation at the UCSF Postgraduate Periodontology Clinic for a second opinion of your periodontal condition? (select one)

☐ Yes  ☐ No

6. To the best of your recollection, before you came in for your evaluation at the UCSF Postgraduate Periodontology Clinic, were you expecting surgery in your treatment plan? (select all that apply)

☐ Yes, my doctor (eg. general dentist, prosthodontist, etc.) indicated that surgery would be necessary.

☐ Yes, I had a feeling that surgery would be necessary.

☐ Yes, I researched online and anticipated that surgery would be necessary.

☐ Yes, I spoke with someone who had undergone periodontal therapy, and anticipated that surgery would be necessary.

☐ No, I was surprised that surgery was suggested.

7. What did you like most about your evaluation at the USCF Postgraduate Periodontal Clinic? (write your response below)

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

8. What did you dislike most about your treatment at the UCSF Postgraduate Periodontal Clinic? (write your response below)

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________
9. To the best of your understanding, what was proposed as your periodontal treatment plan? (select all that apply)

☐ Cleaning, deep cleaning, or scaling and root planing

☐ Surgery to correct gum disease, pocket reduction surgery, or osseous surgery

☐ Gum grafting

☐ Bone grafting

☐ Implants

☐ Extractions

☐ Other (Please Specify):______________________________________________

10. How would you describe your proposed treatment plan? (select one)

☐ Reasonable

☐ Too aggressive (I would have preferred fewer surgeries, fewer extractions, etc.)

☐ Too conservative (I would have preferred a plan that was more aggressive)

11. After your evaluation, did you receive treatment at the UCSF Postgraduate Periodontology Clinic? (select one)

☐ Yes

☐ No

If you answered “Yes”, proceed to Section C, Question #16

If you answered “No”, proceed to Section B, Question #12

_______________________________________________________________________

SECTION B

12. Why did you decline treatment? (select all that apply)

☐ The treatment plan was unclear.

☐ The cost was too high.

☐ The treatment would take too long.

☐ I did not want surgery.

☐ I did not think the treatment was necessary.

☐ I did not like my resident.

☐ I was not confident in my resident’s skill.

☐ I did not like the faculty.

☐ I did not like the staff (eg. reception).

☐ I did not like the facilities.

☐ Other (Please Specify):______________________________________________

13. Which of the following would have made you reconsider your decision about having treatment? (select all that apply)

☐ A follow-up letter

☐ A follow-up call

☐ A better administrative experience

☐ Lowered cost

☐ The option for sedation during surgery

☐ A different resident

☐ Other (Please Specify):______________________________________________

☐ I would not have reconsidered my decision to decline treatment.
14. Do you plan to have, or have you already started periodontal treatment in another setting? (select one)
☐ Yes ☐ No

15. If you’ve chosen another provider for your periodontal care, what best describes your new provider? (select one)
☐ UCSF Resident from another department (eg Oral & Maxillofacial Surgery, etc.)
☐ UCSF Faculty Practice
☐ General Dentist not affiliated with UCSF
☐ Specialist (eg Periodontist, Oral Surgeon, etc.) not affiliated with UCSF
☐ Other (Please Specify): ____________________________________________
☐ Not Applicable

SECTION C

16. What is your gender? (select one)
☐ Male ☐ Female ☐ Transgender

17. What best describes your race/ethnicity? (select one)
☐ American Indian ☐ Hispanic/Latino
☐ Native Hawaiian/Pacific Islander ☐ White (Non-Hispanic)
☐ Black/African-American ☐ More than 1 race
☐ Decline to state

18. What was your age range at the time of evaluation at the UCSF Postgraduate Periodontology Clinic? (select one)
☐ Under 18 years old ☐ 41-60 years old
☐ 18-25 years old ☐ Over 60 years old
☐ 26-40 years old

19. What is your highest level of education achieved? (select one)
☐ Did not complete High School ☐ Did not complete College
☐ Completed High School ☐ Completed College (4 years)
☐ Completed Graduate School ☐ Decline to state
20. What was your annual household income (before taxes) at the time of your evaluation at the UCSF Postgraduate Periodontal Clinic? (select one)

- [ ] Less than $20,000/year
- [ ] $20,001 - $40,000/year
- [ ] $40,001 - $75,000/year
- [ ] Greater than $75,000/year

21. What was your employment status at the time of your evaluation at the UCSF Postgraduate Periodontal Clinic? (select one)

- [ ] Employed (full or part time)
- [ ] Retired
- [ ] Unemployed and looking for a job
- [ ] Homemaker
- [ ] Disabled
- [ ] Decline to state

22. What was your marital status at the time of your evaluation at the UCSF Postgraduate Periodontal Clinic? (select one)

- [ ] Never Married
- [ ] Divorced/Widowed
- [ ] Married or Cohabitating

23. How would you rate your general health at the time of your evaluation at the UCSF Postgraduate Periodontal Clinic? (select one)

- [ ] Good
- [ ] Fair
- [ ] Poor
- [ ] Very Poor

Again, the UCSF Periodontal Department would like to thank you for your time and effort completing this survey. Please review this questionnaire to make sure that you have answered all the questions in the survey. We highly value our patients’ opinions, and your responses will help identify areas to improve our clinic and patient interactions.
November 1, 2013

Dear Current/Past UCSF Periodontal Patient:

Two researchers at UCSF, Drs. Connie Oh and Mark Ryder, are conducting a study to determine how patients were referred for examination in the UCSF Periodontal Clinic, and to evaluate why they elected to pursue or decline their treatment plan.

A review of our records suggests you are eligible to participate in this study. Participation will involve filling out a brief survey, which is included with this letter. Once complete, you will need to mail it back with the self-addressed, stamped envelope included. The entire survey will take approximately ten (10) minutes to complete, and no other time commitments are necessary.

No personal identifying information will be used in this research, and your responses will remain private and confidential.

If you are interested in participating, please fill out the accompanied survey and mail it back. If you have any questions, please call Dr. Connie Oh.

Participating in research is completely voluntary. It won’t affect your current or future treatment at UCSF Periodontal Clinic if you decide not to participate. If you chose to participate and complete the survey, you are consenting to allow the researchers to evaluate the information contained within it.

Thank you for your time and consideration regarding this survey. Our goal is to improve the care patients receive at our clinic, and your responses will enable various clinical improvements and future patient interactions.

Sincerely,

Connie Oh, DDS
UCSF School of Dentistry
Postgraduate Periodontal Clinic
Appendix 3: Consent Form

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
CONSENT TO BE IN RESEARCH

Study Title: Assessing patient perspectives and drivers to seek or decline periodontal care in a university-based, post-graduate periodontal clinic.

This is a research study, and you do not have to take part. You are being asked to take part in this study because you sought treatment at the University of California, San Francisco Postgraduate Periodontal Clinic within the last five (5) years.

Two researchers, Dr. Connie Oh and Dr. Mark Ryder from the Department of Periodontology, are conducting a survey to learn more about how patients are referred for examination in the UCSF Postgraduate Periodontal Clinic, and why they choose to accept or decline their treatment plan. About one thousand (1,000) people will participate in this study.

If you have any questions, you may ask a researcher.

What will happen if I take part in this study?

If you agree to be in this study, you will complete a survey at home. The survey asks about reasons you sought care at UCSF versus elsewhere, current demographic information, and your overall motivation to either start or decline treatment in the UCSF Postgraduate Periodontal Clinic. It will take you about ten (10) minutes to complete the survey. If we have not received a response after 4 weeks we will place a reminder courtesy call to you. If we have not received a response 3 weeks after this reminder call, we will place a final reminder courtesy call to you.

Are there any risks to me or my privacy?

Some of the survey questions may make you feel uncomfortable or raise unpleasant memories. You are free to skip any question.

We will do our best to protect the information we collect from you. Information that identifies you will be kept secure. The survey itself will not include details which directly identify you, such as your name or address. Please do not put this information on your survey. The completed surveys will be kept secure and separate from information which identifies you. Only a small number of researchers will have direct access to completed surveys. If this study is published or presented at scientific meetings, names and other information that might identify you will not be used.

Are there benefits?

There is no benefit to you. The survey results will be used for research.

Can I say “No”?

Yes, you do not have to complete the survey. If you choose not to be in this study you will not lose any of your regular benefits, and you can still receive medical and dental care from UCSF.
Are there any payments or costs?

You will not be paid for completing the survey. There are no costs to you.

Who can answer my questions about the study?

You can talk with the study researcher about any questions, concerns, or complaints you have about this study. Contact the study researcher, Dr. Connie Oh.

If you wish to ask questions about the study or your rights as a research participant to someone other than the researchers or if you wish to voice any problems or concerns you may have about the study, please call the Office of the Committee on Human Research at 415-476-1814.

CONSENT

PARTICIPATION IN RESEARCH IS VOLUNTARY.

You have been given copies of this consent form to keep.

Thank you in advance for your consideration in participation in this survey.
Publishing Agreement
It is the policy of the University to encourage the distribution of all theses, dissertations, and manuscripts. Copies of all UCSF theses, dissertations, and manuscripts will be routed to the library via the Graduate Division. The library will make all theses, dissertations, and manuscripts accessible to the public and will preserve these to the best of their abilities, in perpetuity.

Please sign the following statement:
I hereby grant permission to the Graduate Division of the University of California, San Francisco to release copies of my thesis, dissertation, or manuscript to the Campus Library to provide access and preservation, in whole or in part, in perpetuity.

[Signature]
Author Signature

09/12/2014
Date