

# Editorial Comment on *Journal of the American Dental Association* article, "Outcomes of Implants and Restorations Placed in General Dental Practices: A Retrospective Study by the Practitioners Engaged in Applied Research and Learning (PEARL) Network"

The following comments are respectfully intended for readers of *Journal of Oral Implantology (JOI)*, Editors of *The Journal of the American Dental Association (JADA)* and *Journal of Evidence Based Dental Practice (JEBDP)*, and the authors of the article titled, "Outcomes of implants and restorations placed in general dental practices: a retrospective study by the Practitioners Engaged in Applied Research and Learning (PEARL) Network." The opinions expressed in this editorial are those of the Editor-in-Chief of *JOI* and not necessarily those of the American Academy of Implant Dentistry (AAID).

The article "Outcomes of implants and restorations placed in general dental practices: a retrospective study by the Practitioners Engaged in Applied Research and Learning (PEARL) Network"<sup>1</sup> published in *JADA* in July 2014 has value. However, the title and conclusions may be implying something other than what the authors had intended. The title implies that readers will be informed about implants that are placed and restored in general dental practices, yet specialists, not general dentists, placed 42.3% of the implants included in the study. Authors often pine over choosing an appropriate title and conclusion for the manuscript reporting the findings of their research. Unfortunately, the content of the *JADA* paper does not "match" its title or conclusion. The *JADA* paper has stimulated a fair amount of commentary, to which *JADA* has responsibly published 4 letters to the Editor and a response letter from the authors.<sup>2-6</sup> Regrettably, these letters to the Editor only partially mitigate the potential for drawing inappropriate conclusions based on the title of the article.

*JEBDP* reviewed the paper and appropriately highlighted 3 key points: 1) "The findings of this study support that formal postdoctoral training in oral Implantology is necessary to achieve high success rates with dental implants"; 2) "A distinct differentiation must be made between survival and success. It has been proposed that 'survival' indicates that implants are present in the oral cavity and functioning, whereas 'success'

denotes a lack of biologic and/or technical complications. Therefore, high survival rates do not necessarily indicate that peri-implant tissues are healthy"; and 3) "Finally, although SORT criteria do not allow for a level of evidence greater than Level 2 (limited-quality, patient-oriented evidence) for a retrospective study design of this type, the information is useful for readers because the majority of dental implants are being placed in general practice settings and not in university settings."<sup>7</sup>

As the *JOI* Editor-in-Chief, I agree with *JEBDP* on the first finding. The AAID mission statement is "To advance the science and practice of implant dentistry through education, research support and to serve as the credentialing standard for implant dentistry for the benefit of mankind." If one were to look at not only this mission statement, but also the AAID's website (<http://www.aaid.com>), it is obvious that the AAID supports and promotes advanced dental implant education and the credentialing of qualified practitioners by testing candidates' knowledge and clinical skills through the Associate Fellowship and Fellowship credentialing examinations. Additionally, the AAID created and supports the examination and credentialing process of the autonomous American Board of Oral Implantology/Implant Dentistry (ABOI/ID).

Support for the second finding is also present. The distinction between survival and success is an obvious distinction and not an item for debate.

However, a statement from the third key point "the information [found in the *JADA* article] is useful for readers because the majority of dental implants are being placed in general practice settings and not in university settings" needs clarification. Elsewhere in the *JEBDP* article the authors state, "The majority of dental implants placed in the present retrospective study were placed by general practitioners. Of course the less favorable results are to be expected, because in private practice dentists are more aggressive and open the implant therapy options to a wider base with less strict control." While I agree that many private practitioners, including both general dentists and specialists, may be more aggressive than those in a strict academic research setting, the above statement inappropriately links "private practice" exclusively to "general

dentists,” and implies that general dentists have less favorable implant results than specialists. Furthermore, the statement “majority of dental implants...were placed by general practitioners” is misleading, as almost half (42.3%) of the implants were placed by specialists (21.9% by periodontists and 20.4% by oral surgeons) and not general dentists.<sup>1,2</sup> Curiously, the statistics showing whether the implant was placed by a general dentist or a specialist were omitted from the original *JADA* article.

In fairness to the authors of the *JADA* paper, they did acknowledge and respond to the 4 *JADA* letters to the editor as follows: “Both Drs Winland and Comisi appear to interpret the word ‘placed’ as meaning surgical placement and, therefore, argue that since generalists and specialists surgically placed the implants in this study, the implant survival and success rates reported are not entirely due to the outcomes of implants placed by generalists, thereby invalidating the conclusions of the study. However, the intent of our study was to determine the outcome of implant therapy in general practice, and not just the outcome of implants surgically placed by generalists. We regret that our use of the word ‘placed’ was misconstrued. Since many generalists refer the surgical phase of implant therapy to other practitioners, we included implants surgically placed by the site practitioner or referral specialist, but the implant had to be restored by the site practitioner. Our intent was to determine the outcome of both the implant and its restoration in private general practice, since most prior implant outcome studies were conducted in specialist or academic settings.”

The issue with “Our intent was to determine the outcome of both the implant and its restoration in private general practice” is that there is no distinction between failures caused by implant placement versus failures caused by restoration. Although specialists placed 42.3% of the implants (generalists performed 100% of the restorations), the general dental practices are being held responsible for 100% of the aggregate failures. Buried in the details of the original article, Table 3 shows that the specialty status of the implant surgeon was not associated with implant failure.<sup>1</sup>

The authors’ clarification is greatly appreciated. However, the title and conclusion of the article are the two sections that a reader will tend to remember, regardless of additional detail and responses. May I suggest that the article, which is listed on PubMed with the original title and conclusion, be amended to: “Outcomes of implant therapy performed as either a team or

solo treatment approach in private general dental practices: a retrospective study by the Practitioners Engaged in Applied Research and Learning (PEARL) Network” and the conclusion could read: “These results suggest that implants placed by either a specialist or a general dentist and restored in a private general dental implant setting may have success rates lower than those reported in studies conducted in academic or specialist settings. However, a limitation of the study is that investigators did not examine the level of implant-specific education the restoring clinician had achieved.”

The “take-home” conclusion of this study is that any clinician involved in dental implant therapy should achieve a level of advanced postgraduate education relevant to surgical placement or prosthetic restoration of dental implants. This postgraduate training could be achieved by continuing education credits (preferably a continuum) or University based specialty programs. The clinician should seek a credentialing standard, such as that of the AAID and/or the ABOI/ID, both to ensure he or she has the appropriate skills to perform implant therapy and to assure the public of his or her competency in the placement or restorative phases of implant dentistry.

I believe the suggested title and conclusion are more appropriate and are in fact in alignment with the AAID’s mission statement.

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#### REFERENCES

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