



Time and cost of maxillofacial prosthetic treatment: The need for assessment



ARTICLE INFO

Article history:

Received 30 January 2022

Accepted 7 February 2022

Keywords:

Maxillofacial prosthetics

Clinical time

Treatment difficulty

Cost

Dear Editor,

We have read with great interest the article titled “Structural factors affecting prosthodontic decision making in Japan” by Wakabayashi et al. and published on Japanese Dental Science Review in 2015 [1]. The authors confirmed that, a cost-utility analysis which can predict the time and costs required for a given prosthodontic treatment is necessary. This is because making a prosthodontic treatment decision takes a lengthy time for patients who have long and complicated histories underlying their current conditions. Therefore, when compared to the working hours and expenditures of health care providers, dentists may not always accept the fees for procedures covered by insurance. In addition, a portion of these fees must be used to cover the technician's fee, which includes the materials used. In this context, prices must be carefully set to maintain an appropriate balance between patients' out-of-pocket expenses and clinics' revenue. Overly high prices would be a burden on patients, whereas overly low prices would prevent doctors from covering their costs, leading them to stop providing unprofitable services. Either way, patients would be harmed as a result.

Maxillofacial prosthetic treatment, which is also covered by national health insurance, plays an essential role in maintaining the well-being of individuals who have lost oral and facial structures. In Japan's super-aged society, maxillofacial prosthetic treatment is notable because the risk of head and neck cancer increases with age. Other conditions requiring surgical treatment such as medication-related osteonecrosis of the jaw [2] are also increasing, contributing to the rising number of maxillofacial patients. However, the number of maxillofacial prosthodontists is not enough to keep up with the rising number of patients. This is because the current price setting is not reasonable for the level of skill required.

Maxillofacial prosthetic treatment requires joint knowledge of cancer treatment, head and neck surgery, and plastic surgery in general. Challenges during treatment are often caused by the altered oral anatomy, missing and scarred tissue, bulky flaps, sensitivity disorders, muscle balance, lip incompetence, trismus, loss of bony structures and/or teeth, side effects of radiotherapy and chemotherapy, and changes in facial appearance. In addition, treatment can be complicated by the lack of space for a prosthesis, insufficient support, impaired tongue function, and loss of integrity and competence of the velopharyngeal complex [3]. Maxillofacial prosthodontists therefore require longer chairside time to complete the steps in prosthetic treatment. The total cost of treatment is also higher for larger prostheses, which require more material and typically more frequent follow-up visits. Considering all these factors together, maxillofacial prosthetic work can be regarded as a tedious job that requires greater clinical time, effort, and expenses to meet the abovementioned challenges.

Reimbursements under the current system do not reflect the actual burden of such complex treatment and no reports in the literature have focused on the time and cost for prosthetic treatment in maxillofacial patients, both of which are expected to be greater than those in other patients. Future studies are therefore needed to reveal the economic burden imposed by maxillofacial prosthetic treatment so that the level of difficulty can be appropriately categorized, and its treatment price appropriately set.

Ethical statement

Not needed because this work doesn't involve any human subjects or animal studies.

<https://doi.org/10.1016/j.jdsr.2022.02.001>
1882-7616/

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Acknowledgements

This work was partially supported by the Japanese Dental Science Federation (JDSF-DSP1–2021–208–1).

Conflicts of interest

None.

Scientific field of dental science

Maxillofacial prosthodontics.

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