# A Need to Estimate the Economic Burden of Oral Cancer in India

Dear Editor,

Oral cancer is a major public health problem in the Indian subcontinent, where it ranks among the top three types of cancer in the country. India accounts for a whopping one-third of the global oral squamous cell carcinoma burden.<sup>[1]</sup> According to the GLOBOCAN 2018, there were 119,992 new cases of oral cancer in the country, with 72,616 deaths due to the same in 2018.<sup>[2]</sup> Oral cancer includes tumours of the lips, gum, mouth floor, soft palate, hard palate, tonsils, and salivary glands. Although screening for oral cancer is relatively simple, in India the prevalence of oral cancer is high, especially among the low-income groups. This is probably due to a wide exposure to risk factors such as tobacco chewing, premalignant lesions, insufficient exposure to newly diagnostic aids, lack of awareness regarding cancer, and lack of access to health infrastructure, resulting in a delay in diagnosis and management of oral cancer.

The economic burden can be divided into direct and indirect costs. Direct costs include the cost of diagnosis including imaging and prediagnostic tests, treatment, follow-up, palliative care in advanced cancers, and recurrence, which is relatively common in advanced cancers. The treatment ranges from surgical excision to radiation and chemotherapy. The indirect costs are travel and accommodation costs incurred during diagnosis and treatment of oral cancer, and it also includes debits experienced due to loss of work, caregiver and home-care costs, reduced employment, and working hours due to posttreatment morbidity. In Western Europe, lip and oral cavity cancers are ranked seventh with lost production of €400,000 in men and more than €150,000 in women.<sup>[3]</sup> In India, the loss of productivity due to oral cancer is estimated to \$386 million each year.<sup>[4]</sup> Pollaers et al.<sup>[5]</sup> highlighted the importance of early diagnosis of oral cancer for minimizing costs to the health system. They found that inpatient costs, outpatient costs, and total costs increased with increasing pathological cancer stage; with the postdiagnosis, the overall cost for patients with Stage 4 oral cavity cancer was more than two times greater than for patients with Stage 1 oral cancer.

We attempt to highlight the health economics of oral cancer in India, namely the world scenario. Appropriate data on cost of care including indirect cost for oral cancer are the need of the hour for developing action plan. We would like to stress an urgent clinical and financial need to explore novel mass screening techniques for early diagnosis, increase awareness about oral cancer, and to develop newer treatment modalities with reduced recurrence in order to decrease the financial burden on the patients and the nation.

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#### **Conflicts of interest**

There are no conflicts of interest.

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