



## Editorial

### Overcoming oral cancer menace

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Oral cancer is the eighth most common cancer in the world among men and the 14th among women, accounting for nearly 3 per cent of all cancer cases worldwide.<sup>1</sup> Despite better understanding of the disease process and numerous advances in treatment, the 5-year survival rate of oral cancer has remained approximately 50 per cent.<sup>2</sup> Deaths associated with oral cancer are particularly high because this cancer is all too frequently diagnosed late in its development. Discovery at these later stages not only increases the probability of metastasis, but also give time to the primary tumour to invade more deeply into surrounding structures. A solution to this problem is to enhance the knowledge and clinical skills of oral health care professionals in order to detect oral potentially malignant disorders (OPMDs) and/or oral cancers at their earliest disease process. This can be achieved by increasing public knowledge and awareness about the significance of standard oral cancer screening as well as opportunistic screening of high-risk groups by general dental practitioners (GDPs). Another approach could be the introduction and usage of adjunctive tools that may facilitate the oral health care professionals to identify or assess suspicious oral lesions that may have the potential of becoming malignant. It is vital to provide clinical guidelines to the GDPs on the proper utility of oral cancer screening measures to not only facilitate them in clinical decision-making but also making these decisions informed and accurate.

The first and the foremost step in the screening of oral cancer is to attain a detailed and comprehensive history of the patient followed by a systematic visual oral examination, where a health practitioner visually examines both extraoral and intraoral region to identify and record any oral mucosal abnormality that appear suspicious and need further investigation. If a lesion is identified, detailed evaluation of the lesion with particular attention to specific characteristics such as duration, size, colour, site, texture and any associated symptoms is performed. In addition to writing all the clinical notes and taking an image of the clinically evident oral lesion at the first visit, it is recommended that clinical pictures are taken during each of the follow-up appointments. This not only serve the medico legal purpose but also helps the health practitioner to compare the progress of the lesion over a period of time and to modify or continue the treatment plan accordingly.

The current gold standard for the assessment of OPMDs and establishing a definitive oral cancer diagnosis is to perform a surgical biopsy followed by histopathological analysis. In addition, a number of adjunctive tools are available which being diagnostic tools, also have the aptitude to identify OPMDs, enhance visualization and assist in selection of biopsy site.<sup>3-6</sup> However, these tools should be used with caution in the background of proper training and experience as they may result in misdiagnosis and/or unnecessary biopsies.

Development of firm guidelines is crucial to not only assess screening programs but also regulate their suitability before they are employed. This will result in the program to be more targeted and cost-effective with lesser probability for over-diagnosis. The UK National Screening Committee for example has listed 22 criteria that need to be met before introducing a screening program<sup>7</sup>. The quality of scientific evidence that is required to show the advantages of screening for the target population is very challenging. Development of an ideal screening test demands a number of characteristics that need to be present<sup>8</sup>. The ideal scenario would be to carry out a prospective randomized control trial to gather evidence about the effectiveness of the screening test shown by reduced mortality rate of the patients who are offered the test. To demonstrate this, the study needs to have a large sample population and a prolonged follow-up. Breast cancer screening by mammography and colorectal



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**Citation:** Awan KH (2017) Overcoming oral cancer menace NHC e101: 1-2

**Received:** Mar 28, 2017

**Accepted:** Apr 06, 2017

**Published:** Apr 13, 2017

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cancer screening by faecal occult blood testing are the only cancer screening procedures for the general population which are based on this ideal setting.

In developed countries, oral cancer being a less common health problem compare to breast and colorectal cancer, no large-scale prospective studies have been performed. Furthermore, it will take many years to produce mortality results if a study to measure the accuracy of the newer tools in oral cancer screening is started now. Having said that, evidence of benefit for the implication of screening programs may also be obtained by smaller clinical trials that show that screening results in early cancer detection. Moreover, observational studies can also be useful in this context by showing comparison of subjects, which are screened, and those that are not screened. Screening of cervical cancer by Pap smear, which is the most long-established cancer-screening program, is one such example.

One easier way to address this issue is to perform opportunistic screening rather than population-based screening. Opportunistic screening is offering screening test to people who visit dental office for other dental related problems or as part of a routine care. The justification for the recommendation of the oral cancer screening to be carried out as opportunistic screening during the routine follow-up appointments is based on the fact the procedure is very

simple and requires very little additional time to perform. Also the potential benefits this program produce greatly outweighs the minimum risks that may be encountered.

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