Oral Cancer Awareness amongst Hospital Nursing Staff

Andrew T Harris, Lachlan M Carter, Vikram P Kavi, Anastasios Kanatas

Correspondence:

Mr. A. T. Harris, Oral Biology, Level 6 Worsley Building, Leeds University, Clarendon Way, Leeds. LS2 9LU. Email: andrew.harris@doctors.org.uk

May 2008
Abstract

Background: Oral cancer is as prevalent as cervical and testicular cancer in the United Kingdom. This disease has 4 cardinal signs which warrant further investigation. These are erythroplakia, leukoplakia, mixed (erythroleukoplakia), and ulceration. Of these the commonest presenting sign is ulceration. Nursing staff provide the oral health care for the patient population in hospital. Admission to hospital provides a ‘window of opportunity’ for ‘screening’ for this disease.

Objectives: This study aimed to investigate whether nursing staff are aware of risk factors for oral cancer, its clinical signs, and could therefore provide a ‘screening’ service for oral cancer.

Method: Through the use of a questionnaire we assessed 121 nursing staff on whether they perceived oral health checks as important; their knowledge of risk factors for oral cancer; and their understanding of common clinical signs of oral cancer.

Results: The results demonstrated over 80% thought oral health check were important; approximately 70% thought smoking was a risk factor but less than 30% thought alcohol was. Ulceration is the most common presentation of oral cancer and 2% thought this was a worrying sign with approximately 40% being concerned over a white or red patch.

Conclusion: An oral health check upon admission to hospital provides an opportunity for nurses to ‘screen’ for oral diseases including oral cancer and allows nurses a greater role in total patient care. Nursing staff regarded an oral health check as important; however, nurses’ awareness of oral cancer risk factors and clinical signs was poor. This study highlights a need for improved education of nurses in oral cancer.
Background

In the United Kingdom oral cancer is as prevalent as cervical and testicular cancer. The incidence is increasing particularly in Scotland and younger patients[1-5]. In the United Kingdom there is a screening service for cervical cancer, however, no such campaign exists for oral cancer. There have been initiatives such as; Mouth Cancer Awareness Week (MCAW); and the West of Scotland Cancer Awareness Project (WoSCAP), to increase the general public understanding of this disease. However, the general population’s awareness of these conditions even in light of such teaching events is still considered poor[6]. Oral cancer mainly affects individuals in the 6th and 7th decades of life with a history of smoking and, or alcohol consumption. Early recognition and referral is essential as less treatment is needed and cure rates and ‘quality of life’ are much better[7-10]. Previous studies have shown that oral cancer can be silent in symptomology with awareness of early signs being more beneficial in diagnosis[11]. Oral cancer has 4 cardinal signs which warrant further investigation. These are erythroplakia, leukoplakia, mixed (erythroleukoplakia), and ulceration. Of these the commonest presenting sign is ulceration. The preponderance of this disease is picked-up through general medical and dental care[12-14]. However, there is evidence to suggest general medical and dental lack of awareness contributes to a delay in diagnosis[13]. There is also a body of evidence that the elder generation do not seek dental care[15]. Nursing staff provide oral health care for the patient population in hospital; this is especially true of the vulnerable elderly cohorts who are more likely to suffer from oral cancer. Therefore, admission to hospital provides a ‘window of opportunity’ for ‘screening’ for this disease. It is paramount that nursing staff are aware of the risk factors and clinical
signs of oral cancer. Therefore, this study questioned hospital based nursing staff in the East Yorkshire region on their awareness of oral cancer, its risk factors and presenting signs.

**Method**

**Participants:** One-hundred and twenty-one ward based nurses at 2 East Yorkshire hospitals from various medical and surgical specialties were assessed regarding their oral cancer awareness by means of a questionnaire.

**Questionnaire:** The questionnaire assessed; oral examination habits, knowledge of oral cancer; its clinical appearance, and risk factors. All questionnaires were completed individually and returned to the authors.

**Ethical considerations:** Ethical approval was sought from South Humber research ethics committee and deemed not necessary for this study (reference number: 05/Q1105/47)

**Results**

All 121 nurses involved in this study completed the questionnaires. The results indicate that over 80% of nurses agree that an oral health check would be of benefit to patients (figure 1). However, of the 121 nursing staff questioned approximately 70% thought smoking was a risk factor, and less than 30% thought alcohol consumption was related to oral cancer (figure 2). Ulceration is the most common presentation of oral cancer and 2% thought this was a worrying sign with approximately 40% being concerned over a white or red patch (figure 3).
This bar chart reveals the percentage of nurses who felt an oral assessment was important.

FIGURE 1. Percentage of nurses who felt an oral assessment was important.

Percentage of nurses who identified certain risk factors for Oral Cancer

FIGURE 2. Percentage of nurses who identified risk factors for oral cancer.
Discussion

In this changing era specialist nurses are expected to triage, diagnose and treat minor injuries. Recently prescribing, ordering investigations, meeting targets and providing out-of-ours care are some aspects of the changing role of nursing staff. Nursing staff have the opportunity to be fundamental in changing the outcome of patients with undiagnosed oral cancer by recognising the early signs of the disease. The significance of their role in oral cancer detection has been previously outlined[9]. Interaction with nurses may allow high risk patients to increase their level of awareness and confidence to seek help when required. The results of this study indicate that whilst there is desire to increase the patients total care, teaching is required to enhance awareness of oral cancer risk factors and signs. Adams (1996) through a questionnaire targeted nurses on acute elderly care and general medical wards on
their knowledge of oral healthcare[16]. The study was not focused at cancer detection but to oral hygiene issues. The study highlighted, in keeping with our work, that nurses thought oral care was an important part of hospital care. The paper went onto surmise that although nurses do receive oral healthcare training as part of their curriculum, this is most often not taught by a specialist in that area. It is therefore appropriate that medical staff that have specialist interests in this area; oral medicine specialists, oral and maxillofacial surgeons, and ENT surgeons could in future train nursing staff on oral healthcare including oral cancer awareness. It is essential to include adequate training in the nursing curriculum as clinical observation and oral examination by nurses may prove effective in improving survival rates for oral cancer[17]. Our data is consistent with research published elsewhere in that targeted education is needed to prepare oral health providers to undertake oral cancer prevention activities[18]. This study highlighted weakness in the training of nurses similar to those reported previously involving the training of medical and dental students[19]. In addition the results in this study reflect those obtained in a previous study involving general practitioners that identified the need for improved education[20]. All of these studies highlighted a need to emphasize the role of alcohol as well as tobacco as a risk factor; and to emphasize the importance of early oral mucosal changes in particular ulcerative lesions and red and white patches. The government have already stated that a key area is earlier detection of cancer which affords quicker treatment which can save lives. The department of health, cancer reform strategy (2007); states that non-medical screening for oral disease may be the focus of the future as individuals at risk from oral cancer are unlikely to have an NHS dentist[21]. The possibility of community nurse clinics or pharmacy advice on oral ulceration would allow increased awareness in the community. There will always be patients who avoid such initiatives and therefore, a hospital oral health check would hopefully pick-up those
individuals who had been admitted to hospital. Whilst this is not a formal screening programme the ability to ‘screen’ individuals especially those at risk who are admitted to hospital would allow detection of tumours at an earlier stage.

**Conclusion**

An oral health check upon admission to hospital provides an opportunity for nurses to ‘screen’ for oral diseases including oral cancer and allows nurses a greater role in total patient care. Nursing staff regarded an oral health check as important; however, nurses’ awareness of oral cancer risk factors and clinical signs was poor. This study highlights a need for improved education of nurses in oral cancer.

**Competing interests**

The authors have no financial and personal relationships with other people, or organisations, that could inappropriately influence (bias) their work, all within 3 years of beginning the work submitted.
Authors’ contributions

VP Kavi and LM Carter delivered the questionnaires. AT Harris, A Kanatas and LM Carter prepared the manuscript. AT Harris and LM Carter edited the discussion and prepared the final draft of the paper. All authors read and approved the final draft of the manuscript.

Acknowledgements

The authors would like to express their gratitude to Mrs Sheila Fisher, Senior Lecturer, Oral and Maxillofacial Surgery, University of Leeds for her guidance in preparation of this manuscript.
References

1. UK CR: Open up to mouth Cancer. 2005.

