**Predictors of Patient-related Delay of Oral Cancer Diagnosis in Bangladesh**

Md Zahid Ullah¹, Jennifer NW Lim², Marie-Ann Ha¹, Bas Bueno-de-Mesquita³

Anglia Ruskin University¹, University of Wolverhampton², Imperial College London³

**Background**

Bangladesh ranked as the second highest country in the world for oral cancer-related death (14.5 per 100,000 populations). Reducing the delay of oral cancer diagnosis can lead to early cancer detection and potentially reduce the mortality rate. Therefore, the aim of this study was to investigate the predictors of patient delay in oral cancer diagnosis among Bangladeshi subjects.

**Method**

To investigate predictors of patient delay (primary delay) in oral cancer diagnosis, 169 new oral cancer cases were recruited for a hospital-based case-control study. A Multiple Logistic Regression Model was used to estimate the Odds Ratio (OR) with 95% Confidence Interval (CI) of patient delay (more than 90 days from the first onset of sign and symptoms to seeking advice from health-care professionals).

**Results**

Out of 169 patients (Mean age: 54 years, Male: 47.9% & female: 52.1%), a total of 59 (35%) patients reported a patient delay of more than 90 days. The mean and median patient delay was 97.5 and 78 days (range 26 -360 days). Using a forward stepwise method for multiple logistic regression analysis, the higher grade of oral cancer (OR=0.34, 95% CI 0.17-0.69, p=0.003) and not visiting the dentist (OR= 5.24, 95% CI 2.57-10.71, p<0.001) were significant predictors of patient-related diagnostic delay.

**Conclusion**

The findings of this study emphasize the need for an educational and promotional campaign against oral cancer to increase patient awareness. Moreover, patients must be encouraged to visit their dentist regularly in order to increase the early detection rate.