



## "AGE ESTIMATION IN INDIANS USING CLINICAL EVALUATION OF DENTAL ATTRITION- A PROSPECTIVE STUDY"

By

## DR. VEENA B PUJARI

Dissertation Submitted to the

Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore

In partial fulfillment of the requirements for the degree of

MASTER OF DENTAL SURGERY

t-1000

In

ORAL MEDICINE AND RADIOLOLGY

Under the guidance of

DR. KIRTY R NANDIMATH

**PROFESSOR** 

DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY
SDM COLLEGE OF DENTAL SCIENCES & HOSPITAL

DHARWAD

2011-2014



## **ABSTRACT**

**OBJECTIVE:** To determine the correlation of attrition with increase in chronological age and to evaluate the accuracy of clinical evaluation in age estimation.

METHODS: 2800 teeth of 200 patients were evaluated in the study. All the patients were evaluated for attrition of teeth by clinical as well as intra oral photographic grading. Two observers evaluated attrition of teeth clinically and three observers evaluated attrition of teeth photographically. The stages of attrition were scored from 0-9. Inter-observer and intra-observer reliability was assessed with paired t test and Karl Pearson's correlation coefficient. Regression analysis was used for age estimation by attrition.

RESULTS: In the present study the most important variable to predict age is the Second Molar In The Maxillary and Mandibular Arch. A strong linear relation of attrition of teeth with chronological age was found. In this study intra oral photographic evaluation of attrition of teeth gave the same results as of clinical evaluation of attrition of teeth where R-Square=0.915 and R-square=0.922 respectively, suggesting that there is only 0.007% variation in assessing attrition of teeth by staging using clinical assessment and photographic assessment.

**CONCLUSION:** Staging of attrition of teeth provides a strong correlation of estimation of age at death. In circumstances where clinical evaluation is not possible, photographic assessment of attrition of teeth gives the same correlation of age at death estimation.

KEY WORDS: Attrition of teeth, Clinical grading, Photographic grading