DISSERTATION TITLE

PREVALENCE AND DISTRIBUTION OF SELECTED DEVELOPMENTAL DENTAL ANOMALIES AMONG PATIENTS VISITING K.S.R. INSTITUTE OF DENTAL SCIENCE AND RESEARCH, TIRUCHENGODE

ABSTRACT

AIMS AND OBJECTIVES

The aim of this study is to determine the prevalence and distribution of selected developmental dental anomalies in size, shape, number, structure and position of teeth among patients visiting K.S.R. Institute of Dental Science and Research, Tiruchengode, Tamilnadu and to statistically analyze the distribution of these anomalies. The main objective of this study is to investigate the prevalence and distribution of selected dental anomalies and to identify the association among these anomalies.

MATERIALS AND METHODS

The study sample will comprise of 94,507 subjects in age range of 14 to 79 years, randomly screened who visited the outpatient Department of Oral Medicine and Radiology of K.S.R Institute of Dental Science and Research, Tiruchengode, Tamilnadu, between April 2014 to September 2015 (One and half years), after obtaining their informed consent.

The study will be undertaken with the aid of clinical examination and intraoral photographs. The following dental anomalies were assessed. Disturbance in size (Microdontia, Macrodontia), Disturbance in shape (Talon cusps, Dens evaginatus, Fusion, Peg-shaped lateral incisors), Disturbance in number (Hyperc_disturbanceontia, Hypodontia), Disturbances
in structure (Amelogenesis imperfecta, Dentinogenesis imperfecta), Disturbance in position (Transposition, Transmigration).

RESULTS

Microdontia was the most common (2.47%) anomaly among the whole study group followed by hyperdontia (1.75%) and peg shaped laterals (1.01%), while dentinogenesis imperfecta (0.01%) was the rarest anomaly, followed by amelogenesis imperfecta (0.02%) and macrodontia (0.04%) among patients visiting K.S.R. Institute of Dental Science & Research, Tiruchengode, Tamilnadu

CONCLUSION

Within the limitations of this study, it was found that:

1) Only a minimum number of individuals had developmental dental anomalies among patients visiting K.S.R. Institute of Dental Science and Research, Tiruchengode, Tamilnadu. (5.83%)

2) Size anomalies were the most prevalent among all other developmental dental anomalies and accounts for about 2.51% in that microdontia comprises of 2.47% and macrodontia comprises of 0.04%.

3) Structural anomalies were the rarest among all other developmental dental anomalies and accounts for about only 0.03% in which dentinogenesis imperfecta comprises of 0.01% and amelogenesis imperfecta comprises of 0.02% made dentinogenesis imperfecta as the rarest among all other developmental dental anomalies.

4) Distributions of dental anomalies are more prevalent in males when compared to that of females in almost all the cases except in structural anomalies including amelogenesis imperfecta and dentinogenesis imperfecta.
5) The disparity in prevalence compared with previous studies might arise from racial differences or differences in diagnostic criteria used by various authors.

KEYWORDS
Prevalence, developmental, dental anomalies, microdontia, hyperdontia, macrodontia, amelogenesis imperfecta, dentinogenesis imperfecta,