CHAPTER 6

CONCLUSIONS
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Based on the findings of the present cross sectional study, the following may be concluded; by applying multivariate analysis:-

In demographic data – under Religion; Islam and Christianity had a significant association with the consanguineous group, while in Parental occupation; Private employment had a weak though a significant association with the non – consanguineous group.

1) With dental developmental defects – non - syndromic supernumerary teeth, hypoplastic/hypocalcemic defect, molar incisor hypomineralization in fathers; molar incisor hypomineralization, fusion and cleft lip and palate in mothers; non – syndromic supernumerary teeth, congenitally missing/impacted teeth, hypoplastic/hypocalcemic defect, molar incisor hypomineralization, fusion, cleft lip – palate, microdontia and ectopic eruption in respondent had a significant association with consanguinity.

2) Pertaining to dental parameters – no spacing in father, mesial step of second deciduous molar relation and Class I incisal relation of the respondent had a significant association with the consanguineous group. Class I and II permanent molar relation of the father and no spacing in the respondent showed a weak but a significant association with the non – consanguineous group.

3) DMFT score for the present study for non – consanguineous group was 2.02±1.42 and 1.82 ± 0.90 for consanguineous group. The deft score for non – consanguineous group was 3.02 ±2.13 and 4.06 ± 2.32 for consanguineous group. deft score was significantly associated with consanguineous group.

4) In risk factors for dental caries - Demographic factors; Unemployment. Oral hygiene practices; frequency of teeth cleaning– (never, once a week, several times a week, once a day), mode of cleaning – (wooden toothpicks), use of tooth paste and knowledge about fluoride in paste. Feeding practices; frequency of sweets consumption – (every day, milk
with sugar—never, several times a month, once a week, every day), tea with sugar — (several times a month, several times a week) and nocturnal bottle feeding with milk had a significant association with dental caries.

5) The **coefficient of inbreeding (F)** for the present study is 0.0538.

Hence, the formulated Null Hypothesis for the present study that there would be no difference in the occurrence of dental caries (DMFT/deft index), dental parameters and dental developmental defects in either of the groups i.e. consanguineous and non–consanguineous group is hereby rejected.

Keeping in view the findings of the present study, I can recommend that individual, family and community have to be educated through IEC programmes and awareness created amongst them, regarding the consequences of consanguineous marriages and that not only medical conditions but non-syndromic dental conditions too have an association with consanguinity. Pre-marital and pre-conceptual counselling is a logical way to allow the couples to make decisions and is more likely to be received with greater acceptance rather than discouraging consanguineous marriages.

Health care workers should have clear laid down evidence based guidelines in counselling couples related to the risks of having dental conditions in their offsprings. Collaboration between dental professionals and geneticists is needed to explore the underlying genetic factors by complete family history and to create a pedigree chart highlighting the affected and unaffected member. In this way, the early recognition of dental defects and dental conditions would permit long range planning and would definitely improve the prognosis through timely orthodontic/dental intervention.