



Trends of Ankyloglossia and Surgical Treatment among Pediatric Patients in South Korea

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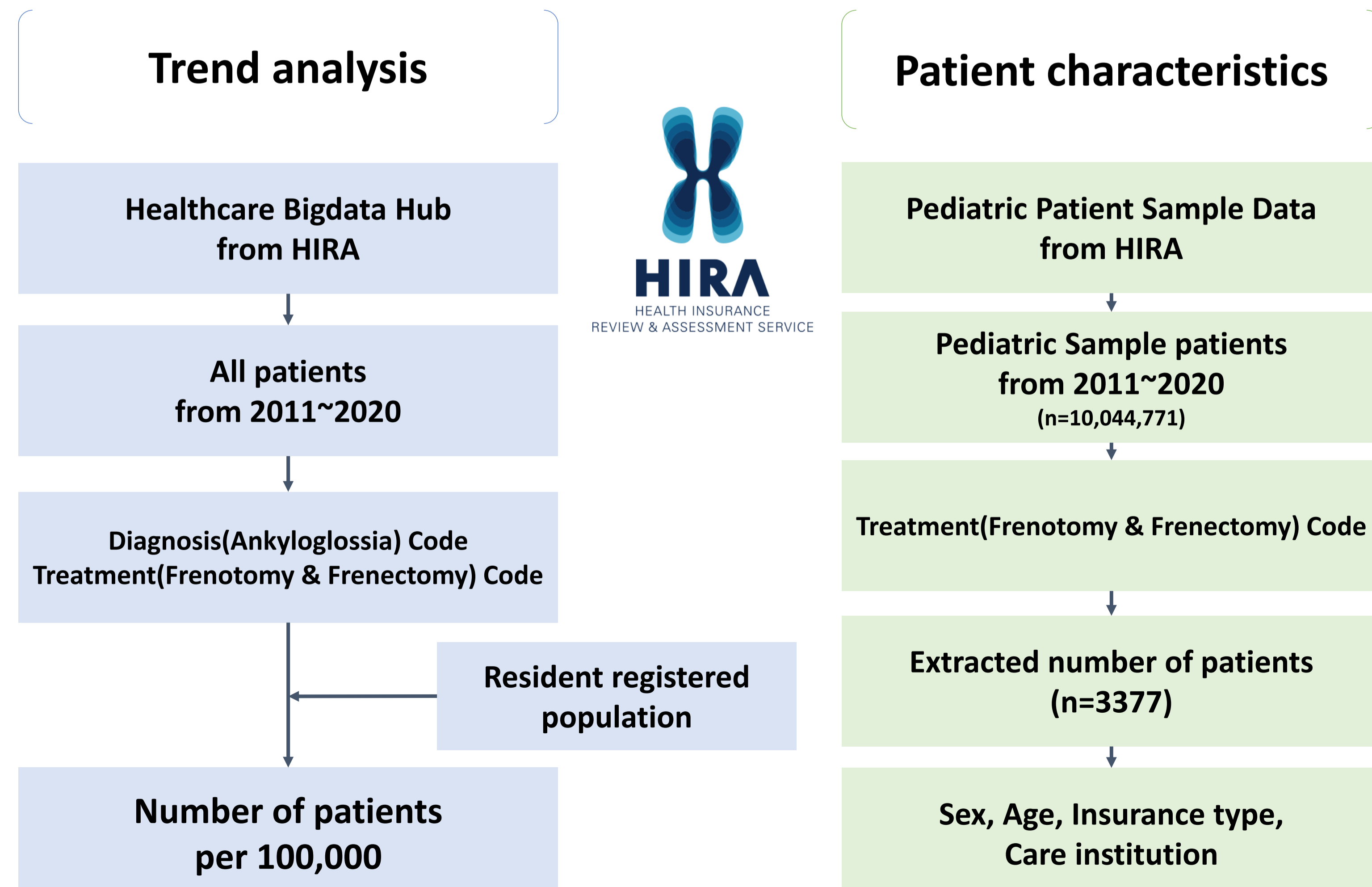


INTRODUCTION

Ankyloglossia is a congenital anomaly that restricts the movement of the tongue due to an abnormally short lingual frenulum. Restriction of movement due to ankyloglossia can result in difficulties with breastfeeding for newborns, as well as speech and swallowing difficulties. In addition, it can lead to orthodontic problems such as malocclusion or anterior openbite. Furthermore, recent research has reported an increased risk of pediatric sleep apnea syndrome regarding with ankyloglossia.

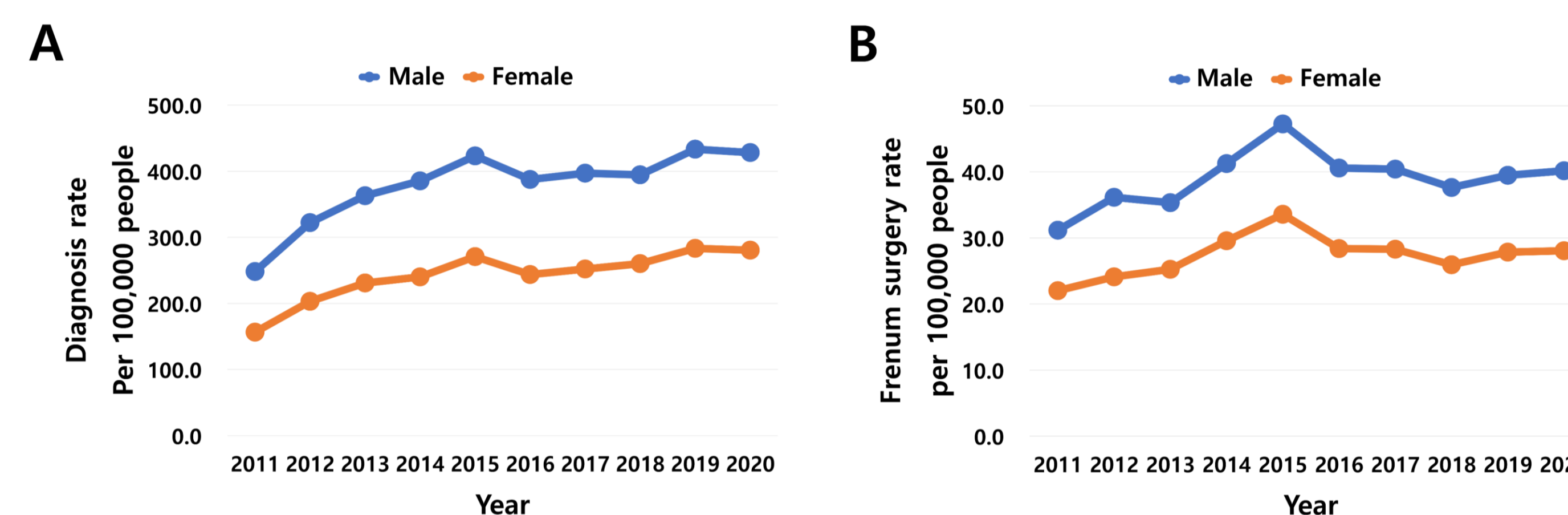
Several countries including the United States have recently conducted nationwide studies on the diagnosis and treatment of ankyloglossia, The number of studies related to ankyloglossia has also increased. However, there is a lack of nationwide research on ankyloglossia and its treatment in South Korea, despite the growing interest in this topic overseas. The objective of this study was to investigate trends in ankyloglossia and its surgical treatment among pediatric patients in South Korea using data provided by the Korean National Health Insurance Review and Assessment Service(HIRA).

MATERIAL & METHOD

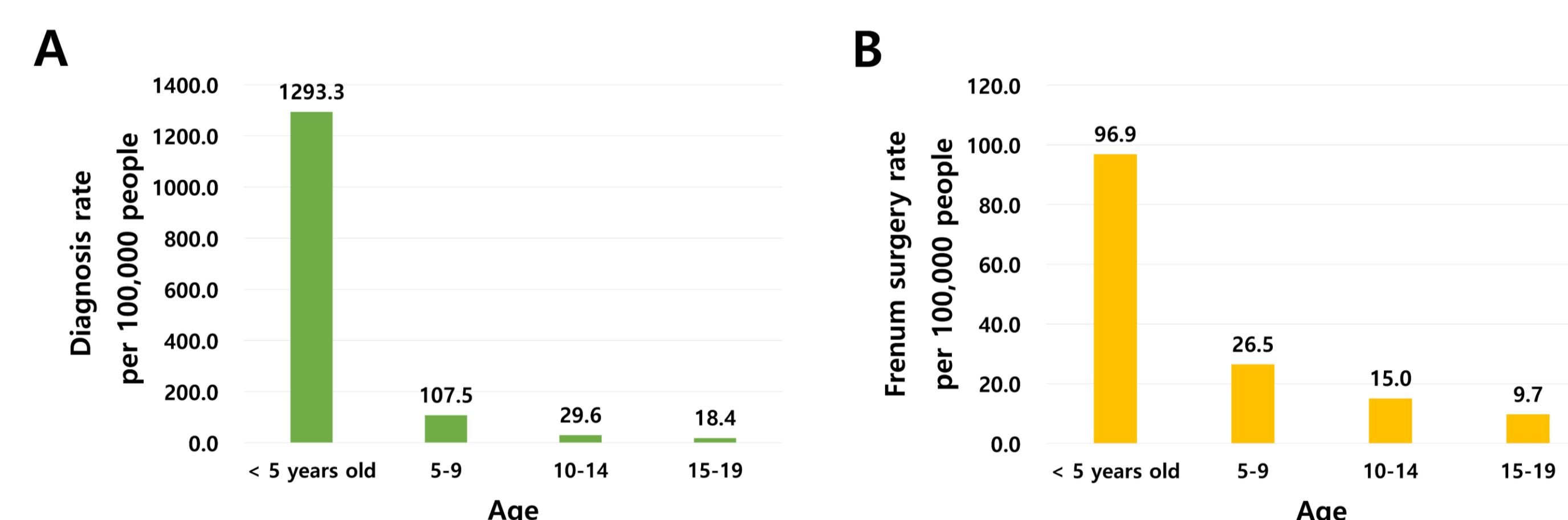


RESULTS

1. Annual Trend in ankyloglossia and frenotomy regarding gender.



2. Trend in ankyloglossia and frenotomy regarding age group.



3. Logistic regression results of frenum surgery patients

| Variables | | OR | p-value |
|------------------|---------------------------|------|---------|
| Sex | Male | ref. | |
| | Female | 0.83 | <0.0001 |
| Age | 0-4 | ref. | |
| | 5-9 | 0.83 | <0.0001 |
| | 10-14 | 0.73 | <0.0001 |
| | 15-19 | 0.70 | <0.0001 |
| Insurance type | National health insurance | ref. | |
| | Medical aid program | 0.83 | 0.1545 |
| Care institution | Advanced general hospital | ref. | |
| | General hospital | 0.82 | <0.0001 |
| | Hospital | 3.10 | <0.0001 |
| | Clinic | 0.38 | <0.0001 |
| | Etc. | 0.41 | <0.0001 |

CONCLUSION

Although the total number of people under the age of 20 decreased over time, incidence rate of diagnosis of ankyloglossia and use of lingual frenotomy increased during the last decade in South Korea. Male were more likely to receive frenotomy than female. Patients were most likely to get frenum surgery at age 0 – 4. Surgical treatments were more likely to be done at hospital rather than clinic or general hospital. Since the function of the tongue can affect maxillofacial development in many aspects, pediatric dentists should pay more attention to the functional management of intraoral soft tissue in growing children.