

Methods One hundred and sixty six children with Down Syndrome less than 16 years were collected from regional hospitals within one year (January to December 2020). We took history, reviewed medical records and performed clinical examination. We analyzed demographic characteristics, attitude and healthcare knowledge of caregivers, screening tests and following up conditions including problems in coping of caring the children with Down Syndrome.

Results Results: Of the 166 participants, majority, (53%) were male. A total of 95(57.2%) were from urban area and most of PDS (96.4%) were cared by biological parents. Half of caregivers in this study group were nongraduate (most are middle-school education). Although (80.7%) were born at regional hospitals, some were unaware of Down Syndrome until the child developed clinical symptoms (maximum age up to 9 years) and (45%) have lack of knowledge about associated health problems. The most common medical conditions reported were cardiac (53.01%), thyroid (13.25%), visual (13.25%), hearing problems (8.43%). Screening tests done for cardiac, thyroid, vision and hearing were 72.89%, 40.96%, 25.3% and 26.51% respectively and only (21.38%) have regular follow up after diagnosis. Most of the caregivers have lack of knowledge about how to care their children, importance of screening tests according to age and regular follow up. Conditions such as financial difficulties, social problems and uneasily accessible health specialties especially for those who live in rural areas became barriers to receive proper health care services.

Conclusions More data are needed to understand health conditions, caregiver knowledge and explore the barriers in seeking proper health care services. Appropriate policies, feasible local guidelines and more education programmes to address health care challenges for Down Syndrome children are crucial to raise awareness of healthcare personals and reduce the gap to receive proper healthcare services. Screening tests according to age and long-term care programs are vastly underdeveloped in poor countries like Myanmar, it will be essential for complementing the support system and sustaining the major role that families or caregivers currently play.

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THE RELATIONSHIP OF LINGUAL FRENULUM AND OBSTRUCTIVE SLEEP APNOEA (OSA) IN CHILDREN

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Background Childhood obstructive sleep apnoea (OSA) is a prevalent disease, and reported to affect around 5% of primary school-aged children. It is also clinically important as it can lead to neurocognitive, metabolic and cardiovascular complications. The tongue plays an important role in maintaining patency of the oropharynx. Lingual frenulum, a connective tissue between the floor of the mouth and the underside of the tongue, can affect the tongue position, its elevation and movements. Short lingual frenulum has been reported to be a risk factor for OSA. How frenulum length and its mobility affects craniofacial development and morphology remains to be defined.

Objectives In this study we aimed to prospectively evaluate the lingual frenulum length by free tongue measurement and tongue mobility in children suspected to have OSA. We hypothesized that OSA children would have shorter lingual

frenulum than their non-OSA counterparts. Moreover, we explored the relationship between frenulum length and craniofacial profile using cephalometry. We hypothesized that cephalometric measurements would be different in children with and without short frenulum.

Methods Prepubertal Chinese children aged 5–12 years old, suspected to have OSA were recruited. Anthropometric measurements including weight, height, and circumferences of waist, hip and neck were taken on the day of admission. The lingual frenulum was evaluated based on tongue mobility and free tongue length. Tongue mobility obtained by a digital caliper was defined by Mpal/Mmax, which are the maximal distances between incisors during full mouth opening (Mmax) and when the tongue tip touched the palatal papilla (Mpal). The free tongue length was measured from the insertion of the lingual frenulum to the tongue tip using Quick Tongue-tie Assessment Tool (QTT). Normal tongue mobility was defined as mobility $\geq 50\%$, and normal free tongue length was defined as ≥ 16 mm. Cephalometric analysis was performed to evaluate the craniofacial profile. OSA was defined as obstructive apnoea hypopnoea index (OAHI) $\geq 1/h$ from overnight polysomnography.

Results In this study, 86 subjects (mean age: 8.36 ± 1.69 years) were recruited, and 50 were diagnosed to have OSA (OAHI $\geq 1/h$). There was no significant difference in anthropometric measurements between OSA and non-OSA groups. The medians of the free tongue length in OSA and non-OSA groups were 20 and 24 mm ($p=0.321$), respectively. The mean tongue mobility was $0.583 (\pm 0.189)$ in OSA group, and $0.680 (\pm 0.152)$ in non-OSA group ($p=0.010$). Free tongue length was significantly correlated with most of the anthropometric variables including age, weight, height, BMI, waist, and hip circumferences, but did not correlate with any of the PSG variables. Tongue mobility was not correlated with any anthropometric variables, but inversely correlated with OAHI ($r=-0.234$, $p=0.030$). In multivariate logistic regression, tongue mobility was independently associated with the presence of OSA after adjusted for age and gender. Tongue mobility was correlated with the cranial base angle (Ba-S-N), which can affect the relative position of the mandible.

Conclusions Reduced tongue mobility is associated with OSA in prepubertal children. Furthermore, tongue mobility may be an important factor in driving mandibular development.

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ARE WE IN CONTROL OF OUR DEMONS? UNDERSTANDING COMPASSION SATISFACTION, COMPASSION FATIGUE AND BURNOUT IN AN ASIAN PAEDIATRIC EMERGENCY IN A PANDEMIC

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Background The medical profession, with its remarkable physical and emotional demands, predisposes physicians to compassion fatigue (CF) and burnout (BO). Though these conditions have been studied individually, little attention has been paid to how pediatric emergency physicians experience these conditions in the context of an Asian emergency setting especially during a global pandemic.

Objectives In our study, we aim to understand the experiences of individual physicians and describe the potential triggers or