

LETTER TO THE EDITOR**MANAGEMENT OF CLEFT LIP AND PALATE IN PAKISTAN***Zoha Asifⁱ, Hafeez Punjaniⁱⁱ, Afshan Memonⁱⁱⁱ, Tahmeena Tabish^{iv}*

Dear Editor,

Knowledge about the effective management of cleft lip and palate, the common birth defect is gaining prominence worldwide. The superintendence of a child with a cleft lip or cleft lip and palate begins from the day the infant is born. Cleft lip and palate management necessitates active participation and coordination among professionals such as clinical nurse specialist, feeding specialist, maxillofacial surgeon, craniofacial surgeon, pediatric anesthetist, orthodontist, dentist, otolaryngologist, consultant pediatrician, consultant ENT, audiologist, speech and language therapist, clinical psychologist, and consultant clinical geneticist.

In Pakistan, limited involvement of speech and language therapists in the neonatal and primary care unit engenders complications. Role of speech and language therapist is significant in creating awareness about specific feeding techniques to prevent primary and secondary complications including malnutrition⁴. Feeding guidelines provided by American Speech and Hearing Association can be provided to clinical nursing specialists enabling them to manage children in NICU or primary care units. Communication difficulties can be addressed by counseling and training of parents and caretakers⁵. A social counselor serves the role of parent advocate, can coordinate with the speech, language therapist to counsel parents enabling them to manage a child born with cleft lip and palate. Dissemination of interaction with the child showing readiness to interact can prevent the child from developing communication difficulties. Surgical repair of the clefts of the lip and/or palate is performed by the maxillofacial surgeons in the first 12 months of life, depending on the individual child's general health and the extent and type of the cleft⁶. In addition to the repair of clefts, a plastic surgeon is specialized to perform surgical procedures of the patient's overall facial aesthetics, feeding function, and speech. Regular appointments with otolaryngologists need to be scheduled for comprehensive assessment of facial framework, which would lead to more effective rehabilitation. Records and treatment plans from professionals including, cleft surgeons, feeding specialists, speech and language therapists are important to be shared with orthodontics and pediatric dentists. These professionals play a significant role in maintaining proper dental and jaw alignment and overall dental care⁷ that would affect swallowing and production of speech sounds. Proper coordination will help the orthodontist to explain and quantitate facial skeleton and soft tissue deformities. It is important to involve an audiologist and otolaryngologist for monitoring hearing, middle ear functions⁸. The coordination with these professionals is important to prevent the occurrence of middle ear infections, which is common with children born with clefts and craniofacial anomalies⁹. Along with rehabilitation provided to the child, additional factors of genetic counseling need to be promoted to discuss and identify risk factors that include family history of cleft lip and palate and mother's general health during pregnancy. Although clefts are not avoidable, however; researches conducted on cleft lip and palate highlighted significance of taking folic acid supplements prior conception or during early phases of pregnancy¹⁰. It reduces the possibility of babies being born with oral clefts.

References

- [1] Dhillon H, Chaudhari PK, Dhingra K, Kuo RF, Sokhi RK, Alam MK, Ahmad S. Current Applications of Artificial Intelligence in Cleft Care: A Scoping Review. *Frontiers in Medicine*. 2021;8.
- [2] Kassam SN, Perry JL, Ayala R, Stieber E, Davies G, Hudson N, Hamdan US. World cleft coalition international treatment program standards. *The Cleft Palate-Craniofacial Journal*. 2020 Oct;57(10):1171-81.
- [3] Ahmed J, Robertson NJ, More K. Melatonin for neuroprotection in neonatal encephalopathy: A systematic review & meta-analysis of clinical trials. *European Journal of Pediatric Neurology*. 2021 Mar 1;31:38-45.
- [4] Sherratt S. What are the implications of climate change for speech and language therapists?. *International Journal of Language & Communication Disorders*. 2021 Jan;56(1):215-27.
- [5] Madhoun LL, Merrell LC, Smith A, Snow E, Cherosky KM. Beyond the Bottle: Interdisciplinary Cleft Feeding Care. *Perspectives of the ASHA Special Interest Groups*. 2020 Dec 17;5(6):1616-22.
- [6] Naujokat H, Himmel AL, Behrens E, Gülses A, Wiltfang J, Terheyden H. Treatment satisfaction and oral health-related quality of life in patients with cleft lip and palate after secondary alveolar bone grafting. *International Journal of Oral and Maxillofacial Surgery*. 2022 Mar 11.
- [7] Ngwu CC, Adamu VE, Eneh CK. Improving children's oral health through assessment, prevention, and treatment. *Orapuh Journal*. 2021 Aug 4;2(2):e814-.
- [8] Meijer AJ, Van Den Heuvel-Eibrink MM, Brooks B, Am Zehnhoff-Dinnesen AG, Knight KR, Freyer DR, Chang KW, Hero B, Papadakis V, Frazier AL, Blattmann C. Recommendations for age-appropriate testing, timing, and frequency of audiologic monitoring during childhood cancer treatment: an International Society of Pediatric Oncology supportive care consensus report. *JAMA oncology*. 2021 Oct 1;7(10):1550-8.
- [9] Woods C. Cleft Lip and Palate: An Educational Guide for Families. Vu GH, Warden C, Zimmerman CE, Kalmar CL, Humphries LS, McDonald-McGinn DM, Jackson OA, Low DW, Taylor JA, Swanson JW. Poverty and risk of cleft lip and palate: An analysis of United States birth data. *Plastic and reconstructive surgery*. 2021 Dec 21;149(1):169-82.

ⁱ Ziauddin College of Speech, Language and Hearing Sciences Ziauddin University (0000-0002-2298-4368)

ⁱⁱ Ziauddin College of Speech, Language and Hearing Sciences Ziauddin University (0000-00030575-4365)

ⁱⁱⁱ Ziauddin College of Speech, Language and Hearing Sciences Ziauddin University (0000-0002-2686-2720)

^{iv} Ziauddin College of Speech, Language and Hearing Sciences Ziauddin University (0000-0003-4728-5763)