



EDİTÖRE MEKTUP / LETTER TO THE EDITOR

The burden of cerebral palsy in Pakistan: an insight into demographic and preventive plan

Pakistan'da serebral palsinin yükü: demografik ve önleyici plana bir bakış

Ammara Rafique¹

¹Department of Biochemistry, University of Karachi, Karachi City, Sindh Pakistan

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To the Editor,

Cerebral palsy (CP) is a neurological ailment that affects movement, posture, and tone due to a static encephalopathy acquired during the fetal, infancy, or early childhood developmental period. The etiology of CP is complicated, inimitable, multifactorial, and not very well-established. Research has reported risk factors for CP including cerebral anoxia, consanguinity, genetic anomalies, home delivery, hypoxic-ischemia, microcephaly, intrauterine growth restriction, infections, low birth weight, monozygotic twins, white matter injury, germinal matrix hemorrhage, smaller gestational age, and more. These risk factors manifest during the prenatal, perinatal, or postnatal developmental periods. CP can be classified based on muscle tone, topographical distribution, severity, and Gross motor function classification system (GMFCS)¹.

Approximately seventeen million people are affected by CP across the world but how many acquire CP in Pakistan? It is questionable area how many childbirths in Pakistan are affected by this disorder on a daily, monthly, or yearly basis. Pakistan is a developing county comprising 5 provinces and has the 5th largest population of over 220 million people but the morbidity data on CP is scant. We surveyed to collect morbidity data on CP in the 6 urban districts of Karachi, Pakistan from the year 2010-2016 by adopting the chain referral sampling method to reach the maximum number of rehabilitation institutes, special or inclusive schools, welfare trusts,

and hospitals. Unfortunately, there was only a 20% response rate from approached private, semi-private, and government health organizations regarding data provision. The difficulties encountered while morbidity data collection was diminished response, high-handed restrictions, lack of data records, reluctance to furnish the data, and unjustified denials. Our data represented a prevalent male-to-female ratio that is 1.4:1, quadriplegic cases (39.9%), spastic tone (53.4%), mild severity (57.7%) cases, and GMFCS Level II (34.4%)². Limited researchers have contributed to collecting data on CP-affected cases in different cities including Karachi city³, Peshawar city⁴, Gujranwala city⁵, Faisalabad city⁶, Islamabad city⁷, and Rawalpindi city⁸. These studies from different cities in Pakistan are not sufficient to determine the precise epidemiology of CP in the country.

Unfortunately, the data regarding CP in Pakistan is limited in all aspects including demographic, risk factors, and preventive plans. An unstructured healthcare system in Pakistan is the reason why CP-inflicted individuals are constantly under-represented and suffer limited access to various kinds of rehabilitation services, medications, and affordable inclusive educational institutes in Pakistan. Therefore, I suggest the formation of an integrated manual or electronic database of CP-inflicted patients in Pakistan for planning adequate preventive and treatment plans. The establishment of demographic data on CP is an initial step to preventing CP in the future. It is suggested that the Pakistani government

Yazışma Adresi/Address for Correspondence: Dr. Ammara Rafique, Department of Biochemistry, University of Karachi, Main University Road, Karachi City, Sindh 75270, Pakistan E-mail: ammararafique92@gmail.com
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shall pay attention to establishing CP data and more rehabilitation centers for CP-inflicted children.

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