Developmental milestones: Even the Physicians don't know enough and what we need to do?

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Madam, we have read " Developmental milestones: Do the parents know enough?"[1] by Mushtaq and Rehman with interest. They have highlighted an important aspect of child health and development which is often neglected in Pakistan. We support their proposals of increasing awareness among the parents regarding developmental milestones. But we also need to target the physicians as well. We, as Rehabilitation medicine physicians with training and expertise in diagnosis, management and rehabilitation of paediatric disabilities have served in different provinces of Pakistan (Punjab, Sindh and Khyber Pakhtonkhawa). We have observed that, apart from the parents (majority of whom are not health care professionals or educated), even many of the Pakistani physicians are not well aware of the important motor and mental developmental milestones in their paediatric patients. More than often they fail to detect the delayed developmental milestone or simply ignore it. The referral for rehabilitation are either delayed or never made. The referral forms rarely have any details of ante-natal, natal and family history of developmental delays. Similarly essential elements of a basic physical examination (tone, abnormal posture, reflexes etc) are not documented.

This has direct negative implications on the long term outcomes of these major and minor disabilities. Some of them include delayed diagnosis; neglected or ignored disabilities; false reassurances that the child will grow out of his physical handicap; progression of disability beyond management and occurrence of secondary preventable complications. This is in addition to the increased cost and burden of care for the parents and the care givers resulting from failure to detect a mental or physical disability earlier.

Although, not all delayed developmental milestones indicate an underlying pathology, but in many cases they are the early indicators of a neurological (e.g. cerebral palsy, spinal muscular atrophy, hereditary polyneuropathies) or musculoskeletal disorder (e.g. myopathies, muscular dystrophies, hip subluxation etc). It is important that if parents report a delayed developmental milestone to the physician it should not be discarded as a normal variant. Early identification of children with developmental delay or developmental disabilities may lead to intervention at a young age when chances for improvement may be best.[2]

While we do not advocate performing extensive radiological and biochemical investigations in every patient with delayed milestones; still documentation of the developmental milestones and a focused neuromuscular examination is mandatory. History should be comprehensive, and must include a detailed prenatal, perinatal, and postnatal history.[3] The minimum documentation in such cases should include natal and ante-natal history, presence of dysmorphic features, head size, neck holding, independent sitting and standing balance, body tone, abnormal posturing, examination of hips and spine. A useful resource can be found here (http://www.dinf.ne.jp/doc/english/global/david/dwe002/dwe00206.html).[4]

Considering the fact that most of the children with delayed developmental milestones in Pakistan usually report to the local GP or paediatrician we propose the following to improve the early detection, management and rehabilitation referral for these patients.

1. It is time that we should strive to streamline the medical education in Pakistan. A mutually agreed core competency skills should be taught to all medical students across Pakistan before they qualify. This should include recognition of delayed developmental milestones.

2. In the current paediatrics fellowship training programme of CPSP there is no exposure to rehabilitation medicine which provides a comprehensive assessment and rehabilitation to children with developmental delay. This results in delayed or no referral to rehabilitation physician once a child with developmental delay is diagnosed. An elective 2-4 weeks rotation in departments of rehabilitation medicine during paediatric training

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programme will ensure that the future paediatricians have a better understanding of the rehabilitation strategies for these children and the functional improvement that can be achieved with early and adequate rehabilitation.

3. There is no rationale for prescribing prolonged and high doses of multi vitamins, Calcium and Vitamin D to children with delayed milestones. This practice should be discouraged. Similarly parents should not always be falsely reassured that the child will grow out of his delayed developmental milestone, without taking a complete history and performing a focused neuromuscular examination.

4. In a busy general practice, obtaining parent description of developmental delay is a good "first line screen", and an efficient and effective way of selecting out children who require a more detailed assessment and/or referral. Early intervention is essential for optimising developmental progress in these children.[5]

5. A comprehensive history is essential, as is careful physical examination. Laboratory and radiological investigations are not a substitute for history and examination in the evaluation of a child presenting with developmental delay, but can be a useful adjunct in determining aetiology.[3]

6. Once a cause for the developmental delay has been identified, the patient should be referred for a rehabilitation consultation. There is growing evidence and consensus statements that rehabilitation is a mandatory part of the management strategy for the children with developmental delay and disabilities, and results in better functional and mobility outcomes and improved community participation.[6-8]

We would also emphasize the lack of adult and childhood disability related research in Pakistan[9] and volunteer to lead a hospital based survey of childhood disabilities across Pakistan. Any assistance and guidance in this regard would be greatly appreciated.

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