

## Developmental milestones: Do the parents know enough?

Madam, developmental milestones are targets or functionality that a child should be able to achieve by a certain age and they serve as markers to evaluate a child's growth and development physically, mentally and psychologically. Parents commonly gauge a child's growth on the basis of its height and weight, but medically there are set milestones that normal children from birth to 5 years of age attain in how they act, learn, speak and play.<sup>1</sup> Centers for disease control and prevention enumerate various milestones for children of different ages, like a 1 year-old child should be able to express common gestures, initiate moves in plays, is responsive to simple oral requests, among others.<sup>1</sup> It's during the first 2 years of a child's life that motor, both general and fine; and verbal development i.e. utterance of mono- and poly-syllables, take place substantially and synchronously.<sup>2</sup>

A retrospective study in Quebec reported parents' poor recall memory regarding the age at which their child acquired language skill of uttering the first meaningful word, although their recall of first step taken is often accurate.<sup>4</sup> The study concluded that neurologists should consider the developmental information provided by parents with caution.<sup>4</sup> A recent review by Aly et al. in Karachi emphasized upon the need of developmental surveillance in Pakistani children to detect any developmental delays.<sup>5</sup> Since responsive parenting is associated with better development and outcome of the child,<sup>6</sup> it is important that parents be aware of milestones that their child should attain at different points of infancy and early childhood. In case of a developmental delay, the sooner the problem detected, the better the chances of a remarkably successful prognosis. A review by Williams et al. identified the need of resources for parents from where they can learn about growth and development of their child and revealed that there's though accurate, but scarce data available online to assist parents regarding up-bringing of their child.<sup>5</sup> Therefore, the role of parents in detecting such developmental delays is of utmost importance, which of course needs proper knowledge and screening on the part of parents.

A study was undertaken in Canada and reported poor awareness of adults about developmental milestones.<sup>7</sup> The study reported that 63%, 15%, 7% and 2% adult respondents answered most questions correctly regarding physical development, cognitive development, social development and

emotional development, respectively. A study from Lahore showed that the children belonging to a lower socio-economic status tend to reach developmental milestones at a delayed age compared to of a higher socio-economic status.<sup>8</sup> Relatively simple measures such as maintaining a proper nutritional status can help infants achieve developmental milestones at an appropriate age.<sup>9</sup> Unfortunately, a study from Sialkot reported that more than half of the study population from a random community sample was malnourished. Post-natal stunting is inversely related with the development of fine motor skills.<sup>10</sup>

In the light of the aforementioned evidences, there is a need to raise awareness in parents, especially in a developing country like Pakistan where literacy rate is already very low. To overcome such a need, we recommend holding didactic awareness sessions and seminars in public where parents are trained by qualified instructors about normal developmental milestones.

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### References

1. Learn the signs. Act Early. Atlanta, USA. Centers for disease control and prevention. (Online) 2010 Oct 1 (Cited 2011 July 4). Available from URL: <http://cdc.gov/ncbddd/actearly/index.html>.
2. Bonvillian JD, Orlansky MD, Novack LL. Developmental milestones: sign language acquisition and motor development. *Child Dev* 1983; 54: 1435-45.
3. Den Ouden L, Rijken M, Brand R, Verloove-Vanhorick SP, Ruys JH. Is it correct to correct? Developmental milestones in 555 "normal" preterm infants compared with term infants. *J Pediatr* 1991; 118: 399-404.
4. Majnemer A, Rosenblatt B. Reliability of parental recall of developmental milestones. *Pediatr Neurol* 1994; 10: 304-8.
5. Williams N, Mughal S, Blair M. 'Is my child developing normally?': a critical review of web-based resources for parents. *Dev Med Child Neurol* 2008; 50: 893-7.
6. Aly Z, Taj F, Ibrahim S. Missed opportunities in surveillance and screening systems to detect developmental delay: A developing country perspective. *Brain Dev* 2010; 32: 90-7.
7. Rikhy S, Tough S, Trute B, Benzies K, Kehler H, Johnston DW. Gauging knowledge of developmental milestones among Albertan adults: a cross-sectional survey. *BMC Public Health* 2010; 10: 183.
8. Yaqoob M, Ferngren H, Jalil F, Nazir R, Karlberg J. Early child health in Lahore, Pakistan: XII. Milestones. *Acta Paediatr Suppl* 1993; 390: 151-7.
9. Masood-us-syed SS, Muhammad S, Butt ZK. Nutritional assessment of children under the age of sixty months in district Sialkot, Pakistan. *J Pak Med Stud* 2011; 1: 7-12.
10. Dewey KG, Cohen RJ, Brown KH, Rivera LL. Effects of exclusive breastfeeding for four versus six months on maternal nutritional status and infant motor development: results of two randomized trials in Honduras. *J Nutr* 2001; 131: 262-7.