Research on autism in Jamaica

Autism now affects one child in every 88 born. As this disorder is four to five times more common in boys than in girls, it affects one in every 54 boys and one in every 252 girls.

Because of the impact of this condition on so many children and families, there is considerable research being conducted worldwide. Research on autism has two major objectives: i) Identifying the causes of autism: Research in this area will help to reduce the number of children being born with autism. ii) Identifying interventions that can improve the outcome of children with autism. Research in this area will improve the lives of children who have been diagnosed with autism. The University of the West Indies' Department of Child and Adolescent Health, recognised as a main referral centre for children with autism, has been conducting research on autism in Jamaica for some years now. This article reports on the findings of research on autism in Jamaica. Causes of autism in Jamaica i) Heavy metals Some scientists think that heavy metals, such as mercury, lead and arsenic, act with specific genes to cause autism. Research in Jamaica has shown that there is no difference in blood mercury, lead or arsenic levels in children with autism and children without autism. Further research is being done to investigate the interaction between genes and heavy metals in children with and without autism. ii) Parental age Researchers have previously found that older parents are more likely to have children with autism. This was also found in Jamaica, where mothers of children with autism are on average about six and a half years older than mothers of children without autism, and fathers of children with autism are on average about six years older than fathers of children without autism. Older parents need to be aware that they are at higher risk of having a child with autism. Interventions to improve outcomes i) Early diagnosis Mothers in Jamaica first become concerned that their children have a problem when they are just below age two, but a diagnosis is not usually made until children are about three and half years, on average. Early diagnosis and early intervention improve the outcome of children with autism. Health and education personnel, who see young children at 'well child clinics' in health centres and early childhood institutions, are critical to the strategy for early identification and early intervention for children with autism. Such personnel, however, must be provided with the training and resources for this. The Child Health and Development Passport issued to every child at birth since 2010 has five key questions to be enquired of at the 18-month health visit, which assist in screening for autism. ii) Home environment and child development Two out of every three children with a diagnosis of autism are known to be developmentally delayed. In Jamaica, children with autism who live in homes where mothers have higher levels of education have higher mental development scores, regardless of the severity of autism. Improving general parental educational level is not an easy undertaking. However, this research suggests that if specific education on stimulating the development of children with autism is provided to parents of all children with autism, we may be able to improve the development of children with autism. This requires further research. iii) Associated behaviour problems Children with autism are known to have other behaviour problems. Jamaican children with autism have been identified to have three main associated behaviour problems. Attention problems are reported in 41 per cent of children by their teachers and 23 per cent by their parents. Oppositional defiant problems are reported in 21 per cent of children by their parents and in nine per cent of children by their teachers. Aggressive behaviour is not very common and is reported in only nine per cent of children by their parents and six per cent by their teachers. Children who are diagnosed with autism in Jamaica should also be investigated for these other behaviour problems, and treatment provided as necessary. iv) Associated physical and neurological problems Paediatric neurologist, Dr Roxanne Melbourne-Chambers, has found that children with autism in Jamaica have larger heads, are more likely to be overweight and obese, have low muscle tone and have more motor-coordination problems than their peers who do not have autism. This is similar to findings in other countries. Maureen Samms-Vaughn is professor of child health, child development and behviour, Department of Obstetrics, Gynaecology and Child Health, University of the West Indies (Mona); email: yourhealth@gleanerjm.com.