Parental concern over childhood vaccinations is increasingly common and is often coupled with fears that over vaccination is linked to neurological disorders, such as autism. Research in Pharmacoepidemiology and Drug Safety assessed the recommended vaccine schedule in the USA and found no adverse associations between vaccines in the first two years of life and neurological disorders in later childhood.

Using publically available data, the researchers evaluated children aged between 7–10 years for neuropsychological problems related to intellectual function, speech and language, verbal memory, attention, achievement and behavior regulation. This was compared with vaccination histories which were obtained from medical charts and parents' records.

On average, children received 7,266, 8,127, and 10,341 antigens by ages 7, 12, and 24 months respectively, and the number of antigens was not associated with any neuropsychological outcomes. However, children with higher antigen counts up to 24 months performed better on attention and executive function tests.

"Some parents are concerned that too many vaccines administered too early in life may adversely affect a child’s health, including neuropsychological development. Concerns about the number of vaccines and their effects on children’s health and development can lead to vaccine refusals or delays in childhood immunizations," said Dr. Iqbal, from the Centers for Disease Control and Prevention, in Atlanta. “We assessed immune exposure from vaccines using a measure of total number of antigens in vaccines received during the first two years of life and found no association with the development of neuropsychological outcomes later in childhood.”