Position statement by the ICNA in Support of vaccinating all children against measles virus.

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Position statement

The position statement of the International Child Neurology Association (ICNA) supports routine vaccination of children against all eligible diseases. The ICNA further emphasises the importance of vaccinations that protect against diseases which can cause severe illness, neurological sequelae and death, especially the measles virus.

This position statement targets clinicians involved in early child healthcare, to guide and assist them in promoting the implementation of comprehensive vaccination with the intent to reduce neurology-related morbidity, due to the measles virus infection.

Overview of the measles virus and subacute sclerosing panencephalitis

Measles is a highly infectious, vaccine-preventable illness which remains a major cause of child morbidity worldwide, with more than 100,000 attributable deaths annually [1, 2]. Globally, the incidence of measles cases is heterogeneous, with the majority of infections and deaths occurring in low- and middle-income countries (LMICs), and sporadic epidemics observed in high-income countries [1, 2, 3]. Acute causes of death include pneumonia, severe dehydration and encephalitis. Young children are the most vulnerable group.

The neurological complications of measles infections carry a significant health impact; children are at risk of developing both acute (e.g. measles-induced encephalitis) and chronic complications, such as subacute sclerosing panencephalitis (SSPE) [1, 3, 4, 5, 6, 7]. Measles-induced encephalitis occurs more frequently in LMICs as a result of poor vaccination coverage, leading to epidemics or regional outbreaks [1, 2, 3]. SSPE is a rare chronic progressive neurodegenerative disease caused by the measles virus primarily infecting the brain in children and young adults [1, 3, 4, 5, 6, 7]. This condition leads to death in most affected cases [7]. There is no curative therapy.

Creating universal immunity against the measles virus will eliminate these neurological complications [8, 9]. Despite measles being a vaccine-preventable disease with potential for eradication, recent global outbreaks of the measles infection raise concern that there will be an upsurge in children suffering serious neuro-complications in the next decade [3].

Measles elimination: progress and challenges

Obstacles to global measles eradication are perceived to be predominantly political, social and financial [1, 10, 11, 12]. Global priorities aim to improve measles vaccination rates to interrupt transmission in low-income countries. Effective implementation of the measles vaccine reduces morbidity and mortality compared to the pre-vaccine era [1, 8, 9, 13, 14, 15]. However, challenges exist in reaching the required immunisation coverage (95%) and are further compounded by low public awareness about the severity of the disease and efficacy of the immunisation [3, 7, 8]. In the setting of global and regional pandemics, such as COVID-19 and Ebola, respectively, healthcare systems suffer often to the detriment of previously instituted intervention programmes, inclusive of routine vaccinations [15, 16]. Current campaigns by groups with inadequate understanding regarding consequences of the disease have compromised efforts to eradicate the disease further [1, 10, 11, 12, 17]. Recent large-scale
studies have unequivocally shown that there is no association between the measles vaccination and the occurrence of autism spectrum disorder (ASD); hence the benefits of the measles vaccination far outweigh the risks of non-vaccination [12, 13].

**Implications of lack of immunisation**

Measles outbreaks occur mainly where people were unvaccinated or have only received one of the two required doses of the measles vaccine [1]. Younger children, or children with HIV who are receiving immunosuppressive therapies or are severely malnourished, as well as those who develop SSPE, are at the greatest risk of morbidity and mortality associated with the measles infection [1, 3, 7].

**Conclusion**

Measles is preventable through the implementation of mandatory immunisation programmes amongst children. In order to eradicate measles, it is critical to universalise implementation of childhood immunisation. Failing to vaccinate children at a young age can lead to severe sequelae or even death associated with acute encephalitis or SSPE.

Clinicians should take a lead in the education of communities on the many benefits of immunisation, and eliminate misconceptions about vaccines and associations with other conditions, especially with the conclusive evidence that there is no link between the measles vaccination and the development of ASD.

The position statement of the ICNA supports routine vaccination of children against all eligible diseases that cause severe neurological sequelae and death, including measles.

**Competing interests**

None.

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**References**


