Sri Lanka's strategic response to the recent measles outbreak through Measles Special Immunization Campaign

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In the aftermath of the COVID-19 pandemic, there has been a noticeable interruption in global and regional routine immunization activities, resulting in a decline in child immunization coverage, including that of measles. Consequently, outbreaks of measles have emerged on a global and regional scale. In this backdrop, despite maintaining very high immunization coverage even during the pandemic, Sri Lanka has been grappling with the appearance of measles cases since May 2023, breaking a four-year measles-free period since achieving the elimination status in 2019.

The outbreak originated from an imported case involving an unvaccinated individual. In its early phase, the majority of reported cases were among individuals who were hesitant to receive the vaccine. The initial epicentre of these cases was notably in the Colombo Municipality Area, subsequently extending to other areas in the district where hesitant groups were located.

The epidemiology of the outbreak demonstrated the increased vulnerability of specific groups. This included unvaccinated or partially vaccinated children aged 9 months to 15 years, as well as those less than nine months who had not yet received their routine measles containing vaccine (MMR) dose. Additionally, individuals aged 20-30 years were identified as a cohort at risk, most likely those who were not fully protected with the two doses of MMR. Thus, based on the recommendations of the National Advisory Committee on Communicable Diseases, the Ministry of Health launched a Supplementary Immunization Activity (SIA) in nine selected health districts. Parallelly, a nationwide special immunization campaign was conducted to capture the minute proportion of vaccine-hesitant children. The SIA guided by epidemiological
evidence offered an additional vaccine dose to the infants aged 6-9 months in the selected districts. The primary goal of the campaign was to protect the vulnerable infants who are more susceptible to complications. Colombo (including CMC area), Gampaha, Kalutara, Galle, Matara, Kandy, Jaffna, Kurunegala and Kalmunai were the districts selected for this activity. The SIA was delivered through the existing primary healthcare delivery system. At the forefront of the SIA implementation were the dedicated public health staff of the medical officers of health (MOH) areas. This activity was carried out under the technical guidance and coordination of the consultant community physicians/regional epidemiologists and the administrative directions of the provincial and regional directors of health services. Advocacy, strategic planning, provision of logistics, implementation, monitoring and evaluation were done at the national level by the Epidemiology Unit. Commencing on 6 January 2024, the SIA continued for four consecutive Saturdays attaining an impressive coverage of 96% of the target population, highlighting the country's capacity to effectively implement strategic public health interventions. The success was facilitated by a multi-pronged community awareness program. The main awareness strategy was a house-to-house leaflet distribution by the public health midwives, personally inviting parents of the eligible children to attend the special immunization campaign while providing information about its importance. This activity was complemented by, a social media and poster campaign, and creating public awareness through national-level electronic media. Capacity building through a series of training activities cascading from the national to the grassroots level, was integral to ensure the effective implementation of the special immunization campaign.

While the immediate impact of the SIA will unfold over time, the successful execution of the campaign marks another milestone in Sri Lanka's battle against measles. By specifically targeting the vulnerable age group and high-risk districts, the country has taken a proactive stance in interrupting the transmission cycle, preventing complications among the target group.

The successful execution of a nationwide immunization campaign targeting the hesitant group in the 9 months to 15 years age cohort vaccinated a sizable proportion of the target group while the SIA in the selected districts achieved very high coverage. This accomplishment within a brief timeframe, reflects coordinated efforts of the public health system cascading from the decision-makers to the grass root level public health staff showcasing the country's ability to adapt and respond effectively to evolving health challenges. The collective effort, meticulous planning, and strategic execution of the special immunization campaign encapsulate a remarkable chapter in Sri Lanka's ongoing commitment to public health and resilience.