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**Time to revisit the strategy of massive vitamin A prophylaxis dose administration to the under five children in India - An analysis of available evidence**

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**Abstract**

Childhood blindness due to corneal ulceration has historically been prevalent among poor Indian children. To tackle this situation the National Institute of Nutrition (NIN), Hyderabad, India, launched (after field-testing) massive dose based national vitamin A (Vit-A) prophylaxis program. Over a period of time reduction in childhood mortality was also hailed as a beneficial effect of the program. Data from the Indian Council for Medical Research (ICMR) indicate that in most Indian states there has been a gradual reduction in the prevalence of Bitot's spots. However, it was not attributed to the prophylaxis program because of its low and patchy coverage. It was, rather, attributed to the control of malnutrition, along with measles vaccination and improvement in healthcare access. Various studies have concluded that massive dose vitamin A prophylaxis does not reduce childhood mortality; this may have been due to the Hawthorne effect; whereby beneficial effects arose from frequent contact of health workers with community members. Paradoxically, harmful effects of massive doses of Vit-A are documented, e.g. acute toxicity in certain groups of children, ranging from increased intracranial pressure, mental retardation (postnatal period), and even death. Vit-A also intensifies bone demineralization, and increased levels can lead to calcium deficiency and, hence, growth retardation in vulnerable children. According to the present authors, for children who have Bitot's spots or who have just recovered from an attack of measles, the best approach is to give Vit-A in therapeutic doses along with adequate daily intake of vegetables and fruits. Public-spirited citizens, along with the scientific community, must ensure the scrapping of the universal massive dose Vit-A prophylaxis approach, to avoid Vit-A toxicity and reduce economic burden to the health system.

**Keywords:**Immunity; Toxicity; Vitamin A prophylaxis.