

Editorial

Integration of Preventive Oral Healthcare Services into Immunization Services: A model proposal

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INTRODUCTION

Children are very fragile and susceptible to several diseases that is why it is important for babies to receive vaccines from the very point of birth. Immunization is the act of giving vaccines to children so they would help fight and prevent infectious diseases because these diseases hamper growth, result in deformities or even death. Immunization boosts the immune system of children empowering them to fight the diseases.¹

Immunization has been noted as the safest and most effective way to protect babies and young children. The benefit of immunization includes gradual elimination of diseases by making it difficult to spread and creating a healthier world through herd immunity.¹ Expanded Programme on Immunization (EPI) was introduced in Nigeria 1974 and the vision of the programme was to tackle the elimination of polio, measles, diphtheria, whooping cough, tuberculosis, and tetanus through immunization. In Nigeria, immunization has been very helpful in controlling some of these diseases. Just recently, Nigeria was declared polio-free. A Vaccine uptake study in a State in Nigeria revealed that about three-quarter (73.3%) of the studied children were fully vaccinated for age.² This means that mothers take their children for immunization because of the perceived risk of not immunizing a child. Our approach is to go and catch them young and in a place they visit regularly. It is therefore uniquely important for the immunization opportunities to be tapped into by integrating preventive oral health services into it, for a holistic preventive service for children.

Oral health plays an important role in children to maintain the oral functions and is required for eating, speech development, and a positive self-image. However, children are also susceptible to dental caries because the caries causing organism are transmitted from mother and caregivers through kissing and use of feed utensils. When caries occurs in a child at 71months of age or younger, it is termed Early Childhood Caries (ECC). A child with ECC may suffer considerable pain,

which may lead to difficulty in eating and talking. If the extent of the damage results in extraction of the anterior teeth by age 2 or 3 years, the child may suffer further developmental delays involving speech articulation and patterns. The delay in physical development is due to poor nutrition and the pain and discomfort may compromise their desire to eat. The pain and suffering associated with the caries affects the child's oral health quality of life. ECC is also associated with other health problems, ranging from abscesses, masticatory disturbances, difficulty in sleeping to gastrointestinal disorders. In Nigeria, the prevalence of early childhood caries amongst the children was 10.5-23.5% and only one out of 25 Nigerian children had visited the dentist.^{3,4}

Dental caries results from the interaction of various aetiological factors, which might be concurrently present to initiate and enhance the disease process. The factors are (1) cariogenic microorganisms, (2) fermentable carbohydrates (substrate), and (3) susceptible tooth surface/host. Other multitude of risk factors associated with ECC are child oral health-care behaviour, inappropriate breast feeding like infants sucking breast till they fall asleep in the night, night time bottle feeding, frequent consumption of cariogenic food; late commencement of child tooth brushing and irregular tooth brushing habits.

The World Health Organization has over time supported the partnership of healthcare services in order to optimise health outcomes with rising interest and increased attention which has empowered many groups to embark on actions that enable the integration of medical and dental services. The Dakar Report on regional oral health strategy recommended the integration of oral health in other established programmes as one of the five major strategies to strengthen capacity to improve oral health of the populace.⁵ Hence, I propose the integration of preventive oral healthcare services into immunization services. It will be done at 6months, 9months and

15months. The proper implementation will steadily and progressive lead to dental caries cavity free future. This oral health promotion for mothers about their children is a farsighted action with a vision because it is known that oral diseases, mainly dental caries starts very early in life and affects all ages in the society.

JUSTIFICATION

This integration of preventive oral healthcare services into immunization services will help achieve holistic preventive health care for children. It will offer mothers and their children seamless access to the dentists and prevent children visiting dentist with complicated oral diseases that may require general anaesthesia with the attendant cost and morbidity. The proper implementation will steadily and progressive lead to

dental caries cavity free future. Loss of school hours for dental treatment will be prevented and school performance will be enhanced. With proper schooling for children, literacy rate in Edo State will fare better. It will also provide opportunity for clarification of oral health myths and possible control of dangerous oral health practices. Malocclusion may be detected early and children put under observation to ensure spontaneous or plan for interceptive orthodontics when appropriate. Adoption of this model will help in building partnership between medical and dental colleagues and also facilitate the operation of one stop preventive shop for children and this will reasonably help us to achieve the United Nations' 17 Sustainable Development Goal 3 which is Good Health and Well-being.

IMPLEMENTATION

Intervention at 4 four different stages of immunization can be seen below

6 Months	Vitamin A 1 st dose	Oral	Mouth
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Dental check, advice on oral hygiene and proper breast feeding for the baby

9 Months	Meningitis vaccine Measles 1 st dose Yellow fever	Intramuscular Subcutaneous Subcutaneous	Anterolateral aspect of left Thigh Left upper arm Right upper arm
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Dental check, advice on oral hygiene/feeding pattern

15 Months	Measles 2 nd dose Vitamin A 2 nd dose	Subcutaneous Oral	Left upper arm Mouth
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Dental check, advice on oral hygiene/feeding pattern, fluoridation with fluoride varnish

A team of Dentists from Department of Paediatric Dentistry or Family Dentistry or Community Dentistry with dental technician/nurses will visit the immunization service centre. The 6months, 9months and 18months children will be seen by a team each which translates to three (3) teams. This will prevent delay and seamlessly introduce the children to oral health and proper oral hygiene behaviour through their mother. The teeth will be strengthened against caries through fluoride application. The proper teeth cleaning which is a primary oral preventive behaviour, will also ensure health of the teeth and gingiva.

CONCLUSION

The integration of preventive oral healthcare services into immunization services will achieve complete health for our children, the future of Nigeria vision bearer. The optimal health will ensure adequate nutrition, growth and development. Loss of School hours for dental treatment will be prevented and school performance will be enhanced. With proper schooling, literacy rate in Nigeria will fare better.

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