

'Workshop on Childhood Dental Caries'

Final consensus paper formulated during

'Workshop on Childhood Dental Caries'

conducted by DCI under the aegis of Ministry of Health

& Family Welfare on 17th & 18th February, 2018

at Mumbai



Workshop on Childhood Dental Caries

Organised by : **Dental Council of India**

Under Aegis : **Ministry of Health & Family Welfare, Govt. of India**

On 17th & 18th February, 2018 at Mumbai (Maharashtra)



Expert Recommended Consensus: *Child Oral Health Policy*

DCI Workshop on Childhood Dental Caries

Executive Summary

- Indian children population at high risk of caries (dental cavity) due to:
 - *Lack of awareness*
 - *High cariogenic diet*
 - *Poor oral hygiene habit.*
- Caries Management Strategies to be age-specific and preventive in nature and should be initiated from the time of gestation (during milk teeth formation).
- Sensitization of Pediatricians/ ASHA/ ANMs (along with training) for oral health education as poor oral health of mother can lead to pre term babies which can impact child's overall health and development
- **Primary schools**- key focus for establishing good oral hygiene habits such as “daily brushing” through utilizing existing program such as Mid- Day Meal scheme followed by brushing.
- To reinforce the role of fluorides in caries prevention through community water fluoridation, varnishes, toothpastes.
- Partnership between Dental fraternity (DCI), Government body & Oral Care Corporates to develop sustainable and social-oriented mass campaigns in a phasic manner.

Burden of Childhood Dental Caries in India

- The National Oral Health Survey (NOHS) 2002-2003 estimated an average prevalence of 40-60% in Indian pre-school children with rural children and those from underprivileged backgrounds displaying greater burden¹
- Transmission of maternal *Streptococcus mutans* has also been identified as an important risk factor leading to the development of early childhood caries²
- Dental caries has a significant impact on growth and development as well as on the general health of the child; a consequence of pain, infection and inability to chew

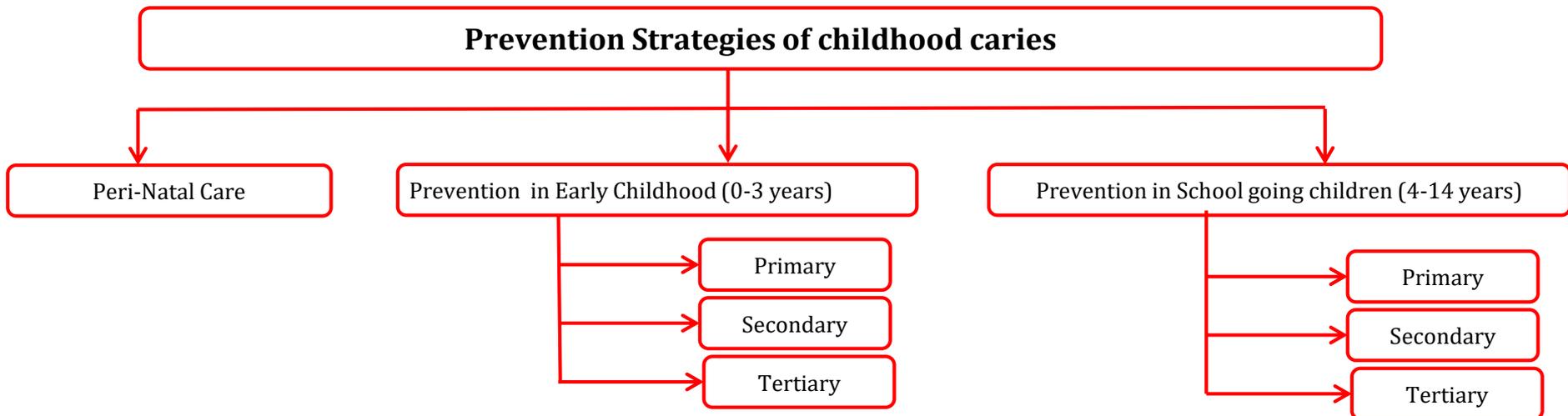
1. Sreedharan A, Faizal CP and Chandru TP. Feeding practices and prevalence of early childhood caries among preschool children in urban and rural areas of Kannur district. International Journal of Dental Research;2016;4(1):11-15
2. Sukumaran A and Anand PS. Early childhood caries: Prevalence, risk factors and prevention. Front. Pediatr. 2017;5:157

Expert Consensus & Recommendations ON:

- **High & variable prevalence of Dental Caries in children:**
 - Lack of awareness
 - Easy availability of cariogenic foods
- **Risk Factors for Childhood Caries**
 - **Infancy (0-2 years):**
 - Maternally derived *S. mutans*
 - Breast feeding on demand, rather than *ad lib*
 - Nocturnal feeding
 - Bottle feeding with high sugar infant formula
 - Not cleaning the child's mouth after feeds
 - **Childhood (3 – 14 years):**
 - Frequent sugar exposures
 - Frequent snacking on foods that are rich in fermentable carbohydrates
 - Faulty oral hygiene

Expert Consensus & Recommendations ON:

- **Preferred Caries Risk Assessment Tools**
 - ICCMS – ICDAS (International Caries Detection And Assessment System)
 - CRAFT
- **Prevention Strategies of childhood caries**



Expert Consensus & Recommendations ON:

- **Peri- Natal Care**

- Initiation of caries preventive activities should be from the time of conception, whenever mother or child is being examined- as teeth formation begins *in utero*

- **Personnel Involved:**

- Pediatricians, gynecologists
- Anganwadi workers, ASHA workers
- Skilled workforce- DISHAs (Dental Integrated Social Health Activist) to be created

- **Expectant mothers to be educated on:**

- Balanced diet during pregnancy
- Maternal free sugar intake – to be less than 10% of the total energy
- Effective maternal plaque control methods like brushing with fluoridated toothpastes

Expert Consensus & Recommendations ON:

- **Prevention in Early Childhood (0-3 years)**
 - **Recommendations on maternal nutritional counseling**
 - 0-6 months exclusive breast feeding as per IAP recommendation
 - Less than 10% energy from free sugar
 - **Recommendations on maternal socio-behavioral counseling**
 - Cleaning of oral cavity with a soft, clean, boiled cotton or muslin cloth or disposable wipes after every feed, from birth
 - Supervised brushing twice a day with fluoridated toothpaste (1000-15000 ppm) after 1st tooth erupts
 - Fluoride recommendations: 0-2 years – a smear, > 2 years - a pea-sized amount
 - **Other recommendations**
 - Yearly dental check-up on every birthday
 - Educating pediatricians on emphasizing drinking water after consumption of sugary syrups
 - Pictorial warning on syrup bottles indicating caries risk and the need to drink water or brushing after syrup consumption

Expert Consensus & Recommendations ON:

- **Prevention in Early Childhood (4-14 years)**
 - Educate child on cariogenic impact of foods
 - Involve teachers, employ dental educators
 - Supervised toothbrushing
 - Fluoride toothpaste use (1000-1500 ppm), pea size
 - Sensitize pediatrician for better oral health care and dental referral
 - Yearly dental check-up on every birthday
 - Collaborate with existing government school programs like midday meals (hand washing followed by tooth brushing with fluoridated toothpaste post meal)
 - Professionally applied varnishes by:
 - Trained professionals
 - Trained para-medics
 - School fluoride mouth rinse program
 - Dental clinic in schools
 - Specific curriculum to be designed to train a school dental nurse
 - Conducting 1 compulsory dental camp each year in every school with the report to be sent to the concerned authorities

Expert Consensus & Recommendations ON:

- **Secondary & Tertiary Prevention**

- Secondary prevention cannot be implemented alone but should be used in addition to primary prevention
 - Training of personnel for early detection - Involving interns, developing new skilled workers- DISHA and training of ASHA skilled force
 - Periodic oral health check ups, every 6 months or at every vaccination visit in 1st year

Expert Consensus & Recommendations ON:

- **Role of Fluorides**
 - Studies have demonstrated a 20 to 50% decrease in caries after fluoride rinsing programs in schools
 - Application of fluoride varnish (~22,600ppm) to the primary teeth of all infants and children starting at the age of primary tooth eruption to 5 years
- **Augmenting the benefits of fluoride in a toothpaste by adding**
 - Arginine and calcium
 - Xylitol
 - Non fluoride topical Remineralizing agents

Way Ahead

Patient level Barriers

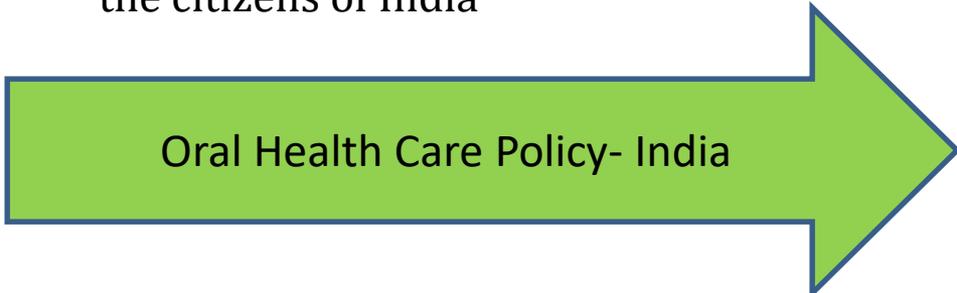
- Health education may have only a temporary effect on caries reduction
- Low level of inclination of expectant mothers to incorporate changes in their oral hygiene routine due to ignorance
- Lack of compliance in use of dental care products
- Unaffordability

Community level Barriers

- Separate budget allocation for oral health care – ***Currently no allocation in the 2015 NHP***
- Funding to provide dental/ oral hygiene aids to children
- Lack of dental care facilities in rural and tribal areas
- Lack of complete coverage of communal/ school water supply to all the citizens of India



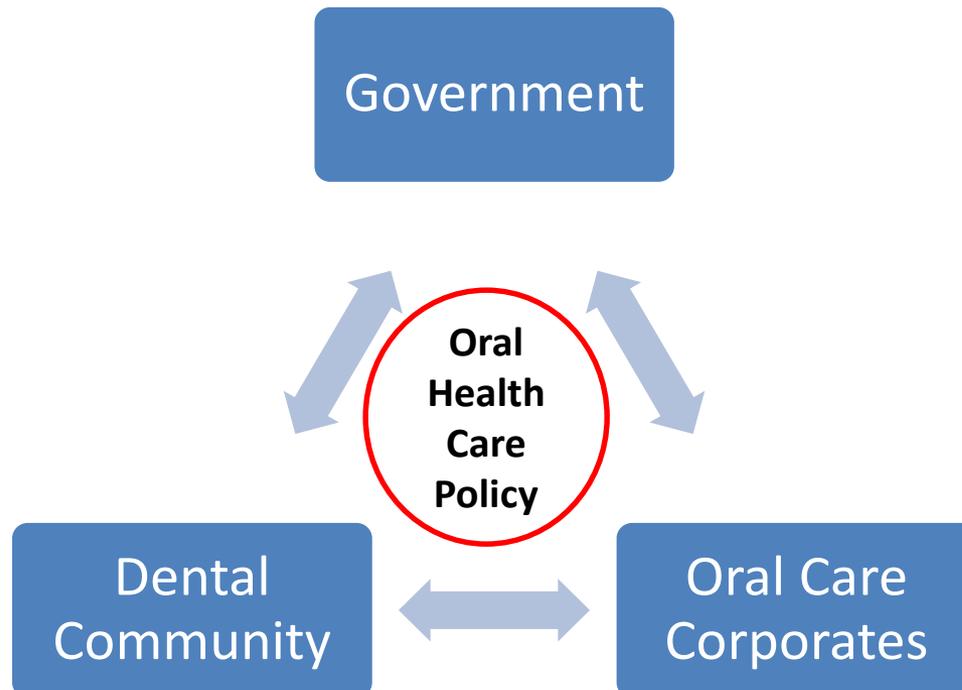
Barriers



Oral Health Care Policy- India

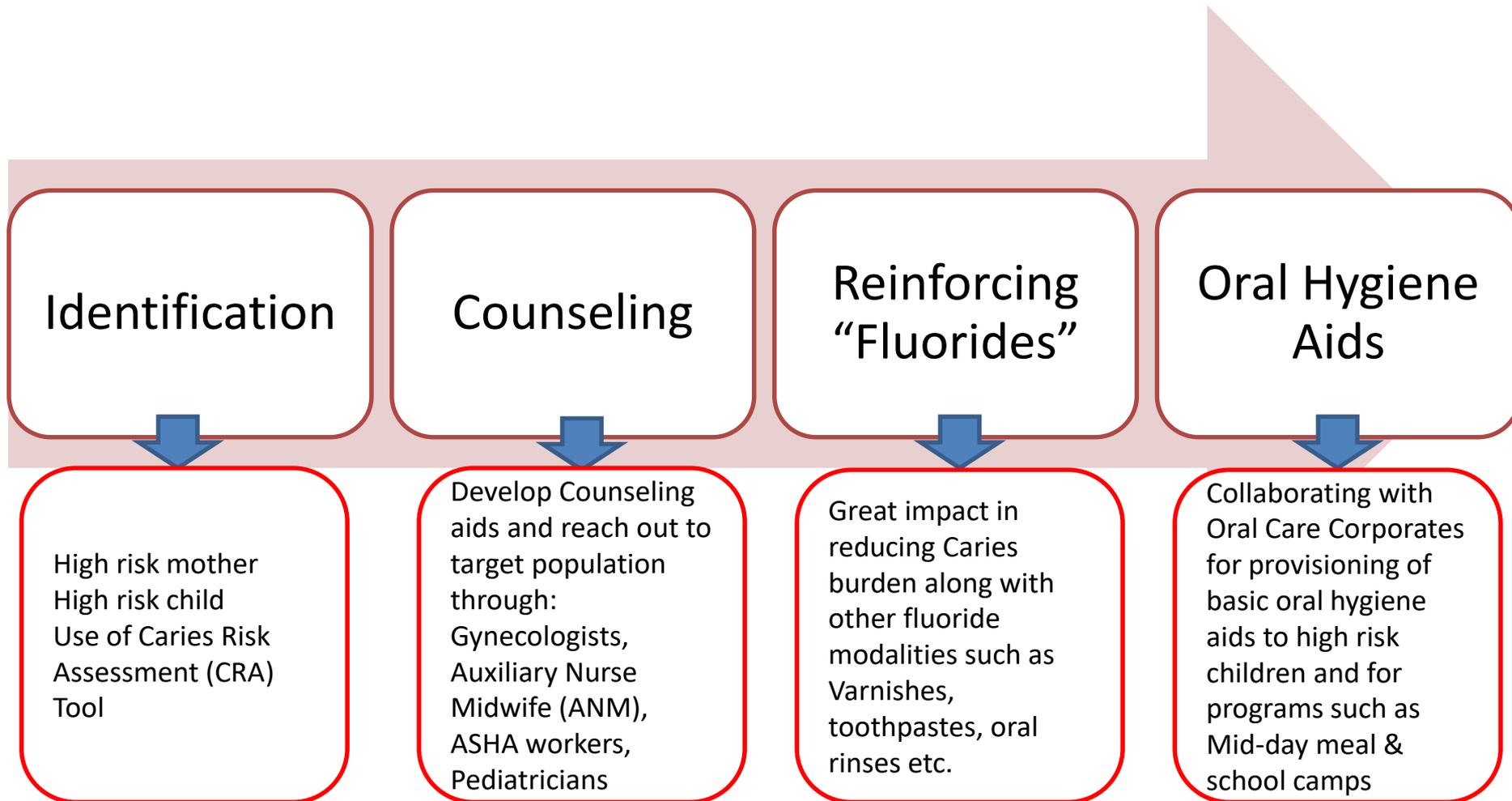
Oral Health Care Policy in India

- The need of the hour in India is to secure the cooperation of the **decision makers and government officials** to work together with **dental professionals** and **oral care corporates** to develop a practical, cost-effective, evidence-based, directed population approach for oral health promotion in infants and children that aims at preventing dental caries



Oral Health Care Policy in India

PROPOSED ACTION PLAN: Overview



Oral Health Care Policy in India

PROPOSED ACTION PLAN: Phase I

Individual



Daily brushing & oral care education through SMS, web based, Videos, lectures, motivational interviewing etc.

Community



Training ASHA & ANMs



Mid-day meal + Brushing



Train The Trainers

Profession:
Medical & Dental



VISIT GYNECOLOGIST FOR:	VISIT PEDIATRICIAN FOR:
<ul style="list-style-type: none"> Reproductive health Menstrual disorders Sexuality and relationships Pregnancy Sexually transmitted infections 	<ul style="list-style-type: none"> Complete healthcare maintenance Vaccinations Illnesses, such as cold, flu, rashes Yearly checkups Treatment of serious diseases

Yearly pap test usually not needed until...



Oral Health Care Policy in India

PROPOSED ACTION PLAN: Phase II

Individual



Daily brushing & oral care education through SMS, web based, Videos, lectures, motivational interviewing etc.

Community



Community outreach through ASHA, ANMs



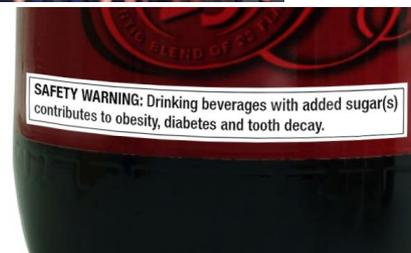
School dental camps + Free samples

Profession:
Medical & Dental

FREE
MEDICAL &
DENTAL CAMP



Complete oral & general health check-up protocol along with education of expectant mothers about their pregnancy, diet, vaccination and dental care



"Sugar content" Label on Sugary drinks and risk of cavities