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An Assessment of a Public Health Initiative of Homeopathy for Primary Teething

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Abstract

Background Children have minor gastrointestinal issues, such as a runny nose, fever, and diarrhea, when they are going through the main teething process. 'Homoeopathy for the Healthy Child' was a trial public health initiative that aimed to promote healthy teething by delivering home-based treatment utilizing six pre-identified homeopathic remedies for typical problems seen during primary teething. This article describes the results of an effort that aimed to improve children's teething profiles and reduce the frequency of diarrhea and upper respiratory tract infections (URTIs), as well as to evaluate the program's viability. Procedures and Supplies Care for children and the proper use of a set of six medications—Calcarea phosphoricum 6X (CP), Ferrum phosphoricum 3X, Magnesium phosphoricum 6X, Belladonna 30C, Chamomilla 30C—were taught to Accredited Social Health Activists (ASHAs). as well as Podophyllum 30C. Every kid who took part in the study received a steady dose of calcarea phosphoricum between the ages of six months and one year. Using the remaining five medications in the package, ASHAs administered home care for diarrhea, URTI, and moderate fever. Throughout the subsequent twelve months, data on dental habits and bouts of diarrhea or UTIs were documented. Final Product It was common practice to routinely check in with 11,426 youngsters. It seems that any teething delays were addressed over this time, since a higher percentage of children who joined at 6-7 months were nearing predicted teething in subsequent months compared to those who enrolled at 12 months. The months after enrollment demonstrated a decrease in the occurrence of URTIs and diarrhea. The ASHAs were pleased with the program, and the children who took the medication during bouts of diarrhea or URTI felt better thereafter.

Keywords : Accredited Social Health Activist *Calcarea phosphoricum* children dentition diarrhea public health upper respiratory tract infections

Introduction

Infants' first teeth coming in can be a challenging and upsetting time for parents and children alike. During this time, kids may experience some minor symptoms like increased salivation, drooling, running nose, mild fever (<38.9°C), lack of appetite, diarrhoea, circum-oral rash, facial flushing, general irritability, sleep disturbances, crying, fussiness, ear rubbing on the erupting tooth's side, intra-oral ulcers, inflammation of the gingiva overlying the tooth, gum irritation, and increased biting. There is some evidence that teething, diarrhea, and fever are not related.4-6 times Teething is often thought by parents and caregivers to be the cause of gastrointestinal issues including fever and diarrhea.7,8 Acute respiratory disorders and diarrhoea are major sources of morbidity and death in young children worldwide, especially in low-income countries. Fever and diarrhea are frequent ailments in children, especially those under the age of 5. In India, an estimated 300,000 children under the age of five die each year from diarrhea, making it the third leading cause of mortality in this age group. Diarrheal infections are more common among families with young children, those with low socioeconomic position, mothers who are illiterate, children less than five, babies born with low weights, mothers who do not nurse adequately, malnutrition, and unclean living conditions. If there is obvious blood in the stool or a Shigella-positive culture, cholera, a systemic illness, or severe malnutrition is present, antibiotics should be considered. Nevertheless, according to the National Family Health Survey—3, injections and unnecessary anti-diarrheal medications are often provided in the community. Thirty percent of children were given 'unknown' drugs, while sixteen percent were given antibiotics.9 Another major killer of children in India under the age of five is acute respiratory infections (ARIs). Thirty to fifty percent of all pediatric outpatient visits and twenty to thirty percent of all pediatric hospitalizations occur in poor nations, where children have an average of five bouts of acute respiratory illness (ARI) each year. According to community-based estimates, ARI is responsible for 70% of childhood morbidities in these children. Factors that contribute to the increased incidence of ARIs include poor levels of literacy, suboptimal breastfeeding, hunger, inadequate vaccination coverage, and the use of fuels other than liquefied petroleum gas for cooking.10 It follows that children have a combination of symptoms, including a runny nose, low-grade fever, and diarrhea, when they are going through the main teething stage.

To promote good dentition and postpone teething, the early advocates of biochemistry or tissue reme-dies11,12 identified Calcarea phosphoricum (CP) as an essential component of teeth and pushed for its use in these areas.15 The use of CP has grown in recent years. It has been one of the most often recommended medications for children from its first homeopathic use16 all the way up to the current day, and it is a component of almost every commercially marketed teething product.17 Nevertheless, there has been no comprehensive study on the use of CP in children to promote good teething.

Researchers in India and elsewhere have shown that homeopathic remedies may help alleviate diarrhea in children.Research has shown that homeopathy may be effective in treating ARIs (18–20).21–23 There is some evidence from anecdotal evidence and practitioner experience that homeopathy may help reduce morbidity during teething.24,25 dollars

Organized homeopathic research is overseen by the Central Council for Research in Homoeopathy (CCRH), an independent entity of the Ministry of AYUSH, Government of India. The success rate of clinical practice is the target of several research programs.26 The CCRH launched a public health initiative called "Homoeopathy for the Healthy Child" to promote health care for children from 6 months to 1 year old via home-based treatment and frequent CP. The episode details the use of six homeopathic remedies for typical problems seen during the first teething stage. In terms of children's teething profiles, diarrhea episodes, and upper respiratory tract infections (URTIs), this article summarizes the program's efficacy and evaluates its feasibility.

Materials and Methods

Programme Coverage

India is a large country of 29 states and 7 union territories. These are further divided into 593 districts. Each district is divided into sub-districts, whichareknown by different names (*tehsil, taluka*, community development block, police station, *Mandal*, revenue circle, etc.).[27] This pilot programme was undertaken in 10 such community development blocks with

limited access to medical facilities (►Table 1). A homeopathic doctor was identified as the nodal officer in each block.

Linkage with National Health Mission

The Government of India launched a public health initiative, 'National Rural Health Mission' (NRHM), in 2005, with an objective to provide accessible, affordable and quality health

Table 1 Programme coverage areas

No.	State	Districts	Blocks
1	Delhi	New Delhi District	Delhi Cantonment
2	Uttar Pradesh	Gautam Budh Nagar	Bisrakh, Dadri
3	Uttar Pradesh	Gorakhpur	Bhatahat, Chargawan
4	Odisha	Cuttack	Niali, Kantapada
5	Assam	Kamrup	Dhirenpara, Central Zone
6	Maharashtra	Palghar	Vikramgarh

care to the rural, under-served and vulnerable population.[28] This mission was extended as the National Health Mission (NHM) in 2012. The Accredited Social Health Activist (ASHA) is a critical human resource of the NRHM and subsequently the NHM. The ASHA is a resident woman for every 1,000 population. She is trained and supported to function in her own village, securing people's access to health care services, enabling improved health care practices and behaviours and health care provision, as is essential and feasible at the community level.[29] The ASHA functions in the community as a link worker or a facilitator, and as a community-level health care provider.[30] These ASHAs are trained in child health and nutrition, among other aspects such as women's reproductive health, newborn health and infectious diseases. This includes assessment of sick children, classification of fever, management of diarrhoeal diseases and ARIs, amongst others.[31] The ASHAs working in the selected blocks were inducted and trained to implement this programme.

Development of Homeopathy Medicine Kit and Training Manual

A medicine kit was developed with six medicines: namely, CP 6X, *Ferrum phosphoricum* (FP) 3X, *Magnesium phosphoricum* (MP) 6X, *Belladonna (Bell)* 30C, *Chamomilla (Cham)* 30C *and*

Podophyllum (Podo) 30C. In previous studies,[18-20] *Cham* and

Podo were identified as the most frequently indicated medi- cines in paediatric diarrhoea, and *Bell* for fever with acute rhinitis[21]; as such, these three medicines were included in the kit. Additionally, CP, MP and FP were included in the kit based on their traditional use in common problems of children.

Table 2 Indications for the use of medicines

A training manual for ASHAs was developed. This manual detailed dental structure, functions of teeth, common teething-related problems, information on home-based care of diar- rhoea, early signs ofdehydration, oralrehydration methods and usage details of the homeopathic kit. The manual was prepared in English and translated into local Indian languages: namely Hindi, Odiya, Assamese and Marathi for different blocks.[32]

Trainings for ASHAs were held at the time of induction and their skills were periodically reviewed in follow-up interactions. They were specifically trained to maintain date-wise records of dentition pattern, acute episodes of diarrhoea, fever, and respiratory infection, outcome of man- agement and referral to a primary health centre (PHC)/sub-centre (SC) as per individual needs.

Intervention

The ASHAs personally visit each household in their area from time to time, to identify women who require ante-natal care.

After birth of the child, they continue periodical visits to assess the overall health of the child and escort the mother and child for immunization. Parents can approach the ASHA of their region as and when their child is unwell. Within this framework of activities of the ASHAs under the NHM, an additional component of provision of homeopathic medicines for denti-

tion and for common ailments—that is, diarrhoea and cold/ URTI/fever and colic—was included (►Table 2). *Calcarea phosphoricum* 6X was given regularly to all children up to the age of
12 months. During an episode of diarrhoea, URTI or colic, a single medicine was selected from the kit by the ASHA, as appropriate to each child, andgiven for a period of 1 to 3 days, in addition to CP 6X being given regularly. *Calcarea phosphoricum* 6X was discontinued, however, beyond 12 months ofage. Home management methods for general hygiene, management of diarrhoea by continuing oral rehydration and management of common cold or cough, as taught to the ASHAs under NHM, were continued.[31]

The ASHAs also, as a part of their routine care, visited the household frequently or were in contact with the parents by telephone or through a messenger to confirm health of the child. They were asked to maintain records of illness in the child and the medicine given in the register provided to them. They also recorded teething status of the child at the time of initiating CP and at each subsequent visit. They	Condition	Dosage

tookine name		
CP. 6X	All children in the age range 6–12 months	1 tablet twice a day regularly until the age of 12 months
FP. 3X	Child with anaemia	2 tablets once a day for 1 month
	Child with fever	2 tablets four times a day for maximum 3 days
MP. 6X	Child with colic	2 tablets dissolved in hot water for 1 to maximum 2 days
Bell. 30C	Child with running nose, fever	3 pills four times a day for maximum 3 days. To be stopped earlier if the child gets better
Cham. 30C	Child with irritability, crankiness, restlessness, no sleep, refusal to eat food, green stools	3 pills four times a day for maximum 3 days. To be stopped earlier if the child gets better
Podo. 30C	Child with diarrhoea, yellow, offensive stool	3 pills four times a day for maximum 3 days. To be stopped earlier if the child gets better

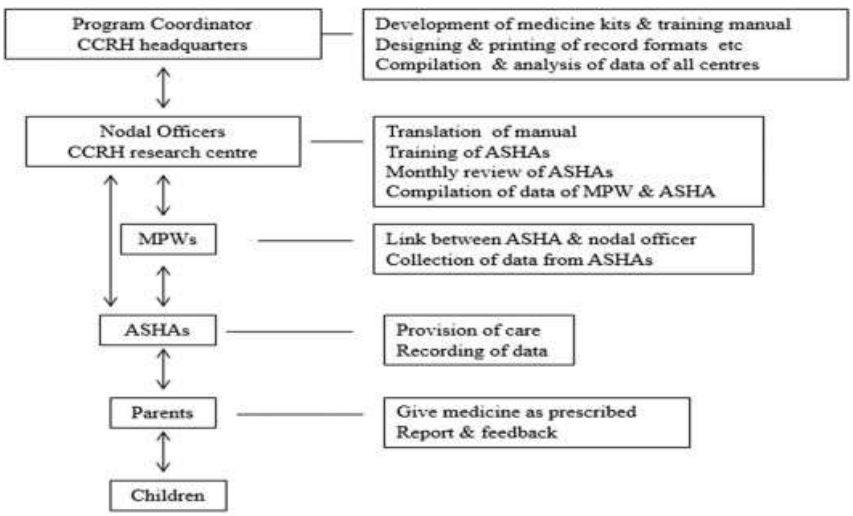

Fig. 1 Programme provision of care and flow of information. ASHAs, Accredited Social Health Activists; CCRH, Central Council for Research in Homoeopathy; MPWs, multi-purpose health workers.

verbal permission from parents to record these data and provide it to the nodal officers.

If the condition of any child deteriorated or there was no change in 3 days, the child was referred to the nearest health facility (PHC/SC for appropriate care). In no case was the medicine continued for more than 3 days.

Review Meetings

Review meetings were held monthly in the identified blocks by the nodal officer, assisted byother identified research associates/ fellows. Additionally, two multi-purpose health workers (MPWs) were posted in blocks with larger number of ASHAs, to interact with them on a regular basis. These MPWs move with the ASHAs in the field, identify their problems, compile data from them and report to the nodal officer daily. The details are given in ►Fig. 1.

Assessment

The nodal officers sent unlinked anonymized data to the coordinating centre, where data from all blocks were compiled.

An assessment of all children in the age group of 6 months to 12 months, completing 1-year follow-up, was made. Feedback from the ASHAs, seeking their perceived usefulness of the programme, was taken in a pre-designed questionnaire.

Results

In 25 group trainings, 1,064 ASHAs were trained, out of which 769 could work regularly and collect data. Eleven thousand four-hundred and twenty-six children (52.6% boys and 47.4% girls) were enrolled and followed up (►Table 3).

Teething Pattern in Children

Limited literature identifies expected numbers of primary teeth in each age group. Minor differences between boys and girls have also been reported.[33] Age of primary teething was identified based on the number of teeth in children enrolled at different age groups (from 6 to 12 months). In each age group, the highest proportion of children with a specific

Table 3 Number of ASHAs and children enrolled and who were followed up regularly block-wise and age-wise

S.no	Block	No. of ASHAs enrolling and following children	6 months	7 months	8 months	9 months	10 months	11 months	12 months	Total no. of children followed up regularly
1	Delhi Cantonment	19	82	70	64	43	36	40	0	335
2	Vikramgad	186	593	235	182	204	169	117	0	1500
3	Dadri	75	107	89	34	203	130	108	323	994
4	Bisrakh	73	359	366	381	340	426	247	841	2960
5	Central zone	89	353	257	236	275	260	215	161	1757
6	Dhirenpara	68	361	248	236	190	215	153	84	1487
7	Kantapada	88	215	206	131	113	127	94	0	886
8	Niali	151	262	235	230	184	203	174	1	1289
9	Chargawan	16	23	8	18	12	32	15	28	136
10	Bhatahat	4	20	14	17	12	10	8	1	82
	Total	769	2376	1728	1529	1576	1608	1171	1439	11426

Abbreviation: ASHA, Accredited Social Health Activist.

Table 4 Age for primary teething

Number of emerged teeth	Age (in months) for primary teething as identified in literature[33]		Age (in months) for primary teething as identified for the children under this programme
	Girls	Boys	All children
0			6
1	7.72	7.55	7
2	8.73	8.63	8.5
3	9.76	9.60	10.5
4	10.41	10.91	10.5
5	11.15	10.76	11
6	12.16	11.75	12.5
7	13.13	13.01	13.5
8	14.44	14.34	14.5
9	15.72	15.26	16.5
10	16.11	15.28	17.5
11	16.35	16.20	17.5
12	17.75	17.26	18.5
13	19.25	18.47	19.5
14	19.78	19.19	19
15	20.45	19.74	20.5
16	23.17	23.05	18.5
17	25.77	26.48	18
18	26.87	27.37	18.7
19	28.19	28.28	20

number of teeth was identified, which was taken as the average teething age for that number of teeth (►Table 4). Subsequently, age groups (beyond 12 months) were com-

puted by identifying number of teeth in children being followed up over the period of 1 year.

Teething pattern in children, enrolled at age group of 6 to 12 months, was compared with the baseline teething status identified in the population. For this purpose, average age at which number of teeth emerged was taken as the baseline value and then compared with the number ofchildren enrolled at various months. For example, from the average teething age data from our population, it was evident that children usually have one tooth at age of 7 months. Therefore, it was computed

how many children enrolled at 6 months and 7 months, respectively, have one tooth at 7 months. The proportion of children highest among both the months was considered as reaching the average teething age. Hence, in this way the optimum age for starting CP to ease teething was computed. A significantly larger number of children enrolled at 6 months as compared with those enrolled later had one tooth at 7 months, two teeth at 8 months, three teeth at 9 months, four teeth at 10 months, five teeth at 11 months and six teeth at

12 months (►Table 5). Only 3.9% of children enrolled at 12 months had six teeth, whereas 25.5% of children enrolled at 6 months had six teeth when they reached the age of

Table 5 Comparison among children enrolledat different months on number of teeth emerged

Number of teeth at the age stated	Proportion of children	Age at initial enrolment (months)	Proportion of children	*p*-Value
1 tooth at 7 months	0.137	6	0.296	<0.001
2 teeth at 8 months	0.246	6	0.365	<0.001
		7	0.227	0.226
3 teeth at 9 months	0.180	6	0.241	<0.001
		7	0.175	0.727
		8	0.135	<0.001
4 teeth at 10 months	0.263	6	0.267	0.802
		7	0.228	0.027
		8	0.255	0.617
		9	0.145	<0.001
5 teeth at 11 months	0.097	6	0.221	<0.001
		7	0.211	<0.001
		8	0.151	<0.001
		9	0.128	0.013
		10	0.123	0.034
6 teeth at 12 months	0.039	6	0.255	<0.001
		7	0.227	<0.001
		8	0.241	<0.001
		9	0.187	<0.001
		10	0.205	<0.001
		11	0.133	<0.001

12 months. Similarly, 22.7% of children enrolled at 7 months, 24.1% ofchildren enrolled at 8 months, 18.7% children enrolled at 9 months, 20.5% children enrolled at 10 months and 13.3% children enrolled at 11 months; they had 6 teeth when they reached the age of 12 months. The figures indicate that a comparatively larger proportion of children enrolled in preceding months had the expected number of teeth for that age, implying that most of the children had near normal progress of teething. The children approaching the expected teething in the successive months indicated that teething lags (delays), if any, were overcome during this period. In 150 (52.44%) children out of 286 children at 11 months with no teeth and 334 (84.55%) out of 395 children at 12 months with no teeth, the first tooth appeared within 1 month of initiating CP.

Incidence of Acute Illness Episodes

Whereas teething pattern was identified to be more toward the expected number of primary teeth by specific age groups, frequency of diarrhoea and respiratory tract infections also reduced considerably during follow-up.

Diarrhoea incidence showed a decrease in subsequent months after enrolment in all age groups except 10 months and 12 months. In these children, although there was an increase in the immediate succeeding month, the incidence continued to fall over subsequent months (►Fig. 2). Additionally, children

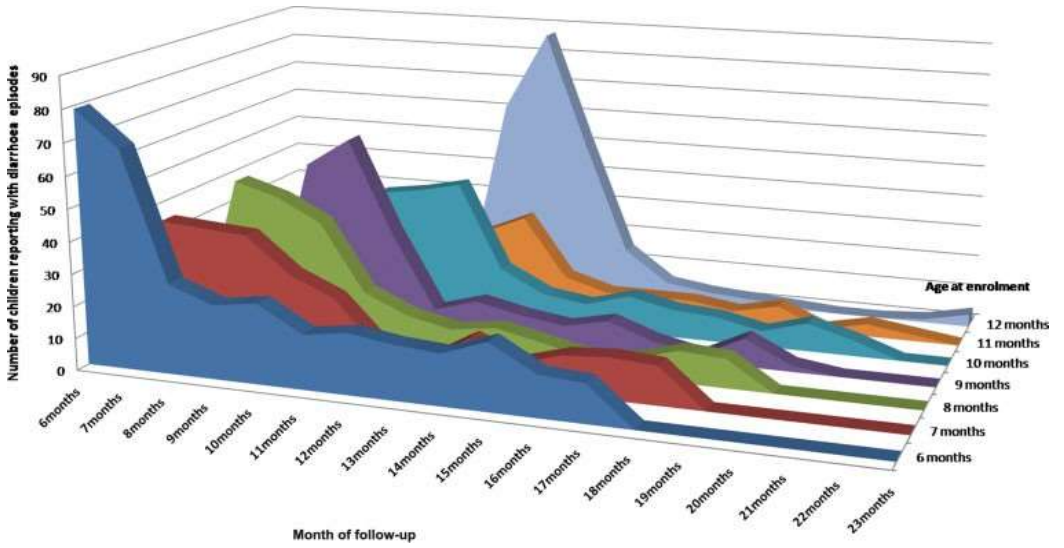

Fig. 2 Children reporting with diarrhoea episodes during follow-up.

responded to *Cham* (for greenish stool) or *Podo* (for yellowish stool) given at the time of a diarrhoea episode.

Running nose/URTI incidence showed a decrease in the subsequent months after enrolment in all age groups except 11 months, where a varying pattern of increase and decrease in episodes is seen (►Fig. 3).

Usage of Kit

Calcarea phosphoricum was used in 11,426 children until they reached the age of 1 year. Other medicines from the kit were used as and when required. *Podo* was used in 1,052 (9.20%) episodes and *Cham* in 533 (4.66%) episodes of diarrhoea. *Bell* was used in all 2,053 (17.96%) cases with URTI. Additionally, MP was used in 207 (1.81%) children with colic, FP in 244 (2.13%) children with pallor suggestive of anaemia, and *Cham* in 233 (2.03%) children with irritability (or crankiness). The ASHAs reported that the children responded to these medicines and only 10 children needed to be referred to SC/PHC.

Referrals

Only one case of a child with diarrhoea was referred at the age of 7 months, having been enrolled at the age of 6 months from the capital zone of Guwahati. Nine

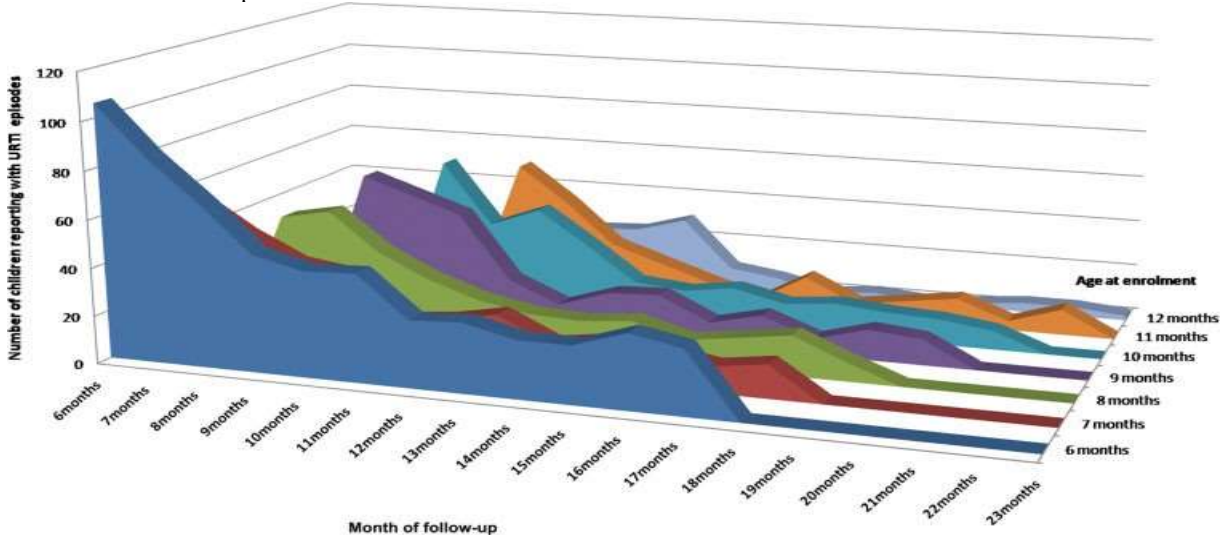

Fig. 3 Children reporting with running nose/URTI episodes during follow-up. URTI, upper respiratory tract infection.

Table 6 Cases presenting with diarrhoea/URTI/fever referred

Block	Age at enrolment	Age at referral	Complaints
Vikramgad	7th month	8th month	Fever
Vikramgad	10th month	11th month	URTI
Vikramgad	8th month	10th month	URTI and fever
Vikramgad	9th month	11th month	URTI
Vikramgad	7th month	10th month	URTI
Vikramgad	6th month	14th month	Fever
Niali	10th month	10th month	Fever
Niali	11th month	14th month	URTI
Kantapada	9th month	12th month	URTI
Capital	6th month	7th month	Diarrhoea

Abbreviation: URTI, upper respiratory tract infection.

children with respiratory complaints were referred (►Table 6).

Usefulness as Perceived by the ASHAs

Five-hundred and eighty-one ASHAs who had provided care to children gave their feedback. Out of these, 566 responded that homeopathic medicines provided by them benefitted the children, 3 responded no effect and 12 did not respond to the question. In terms of effect on teething, 330 ASHAs responded that CP helped in easy teething, 41 ASHAs opined that it reduced complaints associated with teething and 195 responded CP eased teething as well as reduced associated complaints. The ASHAs identified the response to the med- icines given for individual complaints and the number of days in which improvement was usually seen in children

(►Tables 7 and 8). Out of 324 ASHAs who had provided treatment for diarrhoea, 316 were satisfied with the treat- ment response, whereas 3 were not satisfied and 5 did not

respond to the question. Out of these ASHAs, 237 had concurrently provided oral rehydration salts as provided under NHM to the children. Out of 358 ASHAs who provided treatment for running nose/URTI, 349 were satisfied with the treatment, whereas 1 was not satisfied and 8 did not respond to the question.

Overall, 562 ASHAs expressed satisfaction with the pro- gramme being implemented, 6 were not satisfied and 6 responded that they were somewhat satisfied; 7 did not respond.

Table 8 Days to improvement identified by ASHAs

Days	Diarrhoea (Experience of 324 ASHAs)	URTI / running nose (Experience of 358 ASHAs)
Less than 1 day	6	1
1–2 days	133	102
3–4 days	170	243
More than 4 days	5	7
No improvement	2	1
No reply from ASHAs	8	4

Abbreviations: ASHA, Accredited Social Health Activist; URTI, upper respiratory tract infection.

Discussion

Calcarea phosphoricum 6X was the only medicine given regularly to the children, from the time of their enrolment to the age of 12 months. The other homeopathic medicines were used only during acute illness episodes for 1 to 3 days, until the child either improved or was referred to the nearest health care facility. The results can, therefore, be associated more with the use of CP than with the other medicines being used only as short-term care. CP 6X, found safe with no acute or long-term toxicity,[34] has thus shown to have a promising role in primary teething in children.

A slight delay in teething, although not associated with morbidity, can be a cause of concern for the parents. Eruption timing for first primary tooth correlated with first perma- nent tooth eruption has also been reported.[35] More than 20% of the children enrolled at 6 months and 7 months in our study showed a near-normal teething pattern as compared with children enrolled at later months (►Table 5). Near-
normal teething pattern, as expected for that monthly age,
was also seen in children enrolled later. CP 6X has addressed delayed teething in a favourable manner and seems asso- ciated with a healthy teething pattern. Additionally, pro- gressive reduction in diarrhoea and URTI was seen after initiating regular CP 6X. It is suggested that although CP can be started at any age, it is best to start at 6 months, when the response is likely to be favourable, with a healthy tee- thing pattern and a possible reduction in occurrence of diarrhoea and URTI. Although assessment of quality of teeth was neither an objective of the pilot study nor ws expected

Table 7 Response identified by ASHAs providing home-based care for common complaints

Teething associated complaints	Improve	No effect	Worsen	Did not see any cases	No reply from ASHAs
Symptoms of teething such as increased salivation, irritability, and gum swelling	515	11	0	4	51
Diarrhoea	307	5	0	257	12
URTI/Cough	348	1	0	223	9

Abbreviations: ASHA, Accredited Social Health Activist; URTI, upper respiratory tract infection.

from ASHA workers, the findings indicate undertaking a controlled study to quantify the effectiveness of CP, with the assessment of quality of teeth as an additional parameter. The evidence in favour of teething causing diarrhoea or other infections is conflicting. However, it has been repeatedly emphasised that thereshould not be any delay in diagnosis and in management of serious illnesses attributed to teething.[36] Under this public health programme, ASHAs were able to provide immediate home-based care to children with diar- rhoea and URTI, irrespective of whether the infections were attributed to teething or not. Treatment for diarrhoea and URTI with specific homeopathic medicines was largely acceptable and useful. The decreasing incidence of acute illness episodes can be attributed to better awareness, focused care and the timeliness of the medicine being given: the ASHAs and par- ents, maintaining due care of children consequent to their participation in the programme (Hawthorne effect), can also be responsible for decreasing episodes of acute illnesses in the enrolled children. Out of 11,426 children, only 10 referrals to PHC/SC were required and there were no deaths. Considering that no adverse events occurred, utility of homeopathic med-
icine cannot be completely disregarded.

A limited amount of medicine, to be used only in specific conditions judiciously, in regular communication with the physicians, avoided any misuse. The ASHAs reported an increase in parents approaching them about children devel- oping episodes of acute illness and were identified to be a useful channel for delivery of intervention at community level.

The findings favour the view that health workers can be trained to provide home-based care using some common homeopathic medicines, and which does not require knowl- edge of individualisation or symptom assessment as per the requirements of a classical homeopathic prescription. Only cases that do not respond to this first line of care need to be referred to the health facility, thereby reducing burden on these facilities in resource-constrained settings. The pro- gramme was thus found to be feasible and acceptable within the communities studied.

This was a public health programme for enhancing out- reach, accessibility and availability of services through exist- ing health care workers in the community, and was not inherently a clinical trial. The strength of the programme is that it utilises the existing health care infrastructure in the community and is dependent on health care workers for its success. The treatment strategy is integrated with the exist- ing public health measures and is well accepted. It has a major limitation, however, with the absence of a control group. The government records that are available for diar- rhoeal and respiratory episodes in children in a block PHC/SC do not consider children provided care by health workers and are therefore not comparable. The programme attempts to compile relative advantages of using homeopathic medicines as home-based care for specific conditions utilising commu- nity resources. Adequacy of the programme is thus affirmed, since the need to show causality of the intervention to the identified outcome warrants another study that uses a

control group as a comparator.[37] Meanwhile, the programme can be taken up in other regions where resource constraints delay provision of active health care services to children by trained physicians.

Conclusion

An approach with regular use of CP and home-based care with homeopathy through health workers for common problems in teething children is acceptable to the com- munity and enhances outreach of services to the public at large. Considering the relative advantages identified, a controlled study on effectiveness of homeopathy in pro- moting healthy primary teething and its possible role in reducing incidence of diarrhoea and URTI in children is envisaged.

Highlights

- In a public health programme, Accredited Social Health Activists (ASHAs) were trained in child care and usage of a kit comprising six medicines, namely *Calcarea phos- phoricum* 6X (CP), *Ferrum phosphoricum* 3X, *Magnesium phosphoricum* 6X, *Belladonna* 30C, *Chamomilla* 30C and *Podophyllum* 30C.
- Dentition pattern in 11,426 children who were given CP regularly in the age group of 6 months to 12 months was found approaching the expected teething in the succes- sive months, indicating that teething lags (delays), if any, were overcome during this period.
- Children responded favourably to the medicines given by the health workers at the time of diarrhoea/upper respiratory tract infection (URTI) episodes, and diar- rhoea and URTI incidence showed decrease in the months after enrolment.
- Such a programme based on provision of home-based care with a limited number of homeopathic medicines is feasible and acceptable to the community at large.

The Role of the Authors

The program was developed and overseen at all centers by RKM, the primary investigator, in collaboration with AK. In addition to securing administrative and regulatory clearances, he oversaw the project's finances and personnel. In collaboration with DT, AK planned the meetings and reviews at each center and created the study formats and resource materials (ASHA handbook, medical kit). The nodal officers of each allocated block—AV, SS, AKG, RM, RB, ARS, and UKP—worked together with local NHM authorities to organize ASHA trainings, reviews, and data compilation. Nodal officers in their assigned blocks were helped by ShwS, MS, RP, US, AKU, ShrS, SP, and TN in reviewing, providing comments, and compiling data from ASHAs. For this study, ShwS and MS gathered data from all clinics. It was DT and AK who handled the data administration and analysis. The manuscript was written by RKM, DT, and AK. After reading and approving the final draft, all writers sign off.

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Potential Conflict of Interest

Nobody has spoken up.

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References

One Sood and one Sood. Problems with teething in children. Pediatric Oncall 2010;7:20 It may be seen at this link: https://www.pediatriconcall.com/pediatric-journal/view/fulltext-articles/297/J/0/0/374/0. The series was accessed online on January 10, 2018.

2Eskandarian T., Memarpour M., and Soltanimehr E. Primary tooth eruption symptoms and signs: a non-pharmacological treatment experiment. 2015;15:88 in BMC Oral Health.

3Paiva SM, Ramos-Jorge ML, Pordeus IA, Ramos-Jorge J. Symptoms and indications of premolar eruption: a prospective longitudinal study. J Pediatr 2011;128:471-476.

4 Misconceptions about teething revealed in an editorial. 5997:604 (BMJ 1975).

5Hebdon CK, Gibbons HL. Teething injuries leading to mortality. We will examine the past. The article "West J Med 1991;155:658-659" was published in 1991.

Sixth, Malkiel, Eisenstadt, and Pollak. The mythology of teething suggests saying a prayer to ensure a child's teeth be cut safely. Pediatrics and Child Health 2017;53:1145-1148.

7Allen, M., Wake, M., Herschel, K. Perspectives of Australian parents on the topic of teething in infants. Public Health Pediatrics,1999, 35:446-449.

8Jointly published by Barlow BS, Kanellis MJ, and Slayton RL. Signs and symptoms of tooth eruptions: a poll of parents and medical experts. 2002;69:148-150, 123-124, ASDC J Dent Child.
9Jayalakshmy R. and Lakshminarayanan S. The present state and future prospects of diarrheal illnesses among children in India. The citation for the article is "J Nat Sci Biol Med 2015;6:24-28."Krishnan IS, Majumdar A, Chinnakali P, and Selvaraj K. Infectious diseases of the respiratory tract in children less than five in India: situational study. The National Journal of Science and Biomed Ethics, 2014, 5, 15–20.
11J.B. Chapman and W. Schaußler. The Eleven Tissue Remedies by Schussler: A Home Treatise on Biochemistry. Missouri: F. August Luyties; 1897. St. Louis
12W. Boericke and WA Dewey. A Comprehensive Repertory of the Twelve Tissue Remedies of Schüssler, Including Their Theory, Therapeutic Application, Materia Medica, and Homoeopathy and Biochemistry. Publication year 1914 by Boericke & Tafel in Philadelphia, Pennsylvania.
13 Böricke W. Homoeopathic Child Care, Nutrition, and Treatment. From 1911 by Boericke & Runyon Co. of San Francisco
A research on Calcarea phosphorica was conducted by Gibson DM. The British Home Journal, 1969, 58:185–188.
The Anshutz EP is number fifteen. Therapeutic By-Ways; Being a Collection of Thera- peutic Measures Not to be found in the Text Books, Collected from all Sources. Title: 1916 Boericke & Tafel, Philadelphia
16 WM Sorrar. Selected works from a decade spent working at Southport's Children's Sanatorium. "Journal of the British Homoeopathic Society, 1898, 6:82–94"
Vithoullas G. Calcarea Phosphorica, number seventeen. The International Academy of Classical Homeopathy published this work in 1997 as Materia Medica Viva, Volume 6.
18Journal Article: Jacobs, Jonas, Jiménez-Pérez, and Crothers (2019). Synthesized data and meta-analysis of three RCTs on the use of homoeopathy for pediatric diarrhea. The Pediatric Infectious Disease Journal, 2003, 22(2), 229–234-
Singh K, Nayak C, and Singh V (1999). Managing acute diarrhea in children: a prospective multicentric observational research on the efficacy of predefined homeopathic medications. The article "American Journal of Home Medicine" from 2009, volume 102, pages 122–129—
Pavalkar M, Mundra P, Tamboli P, Kothare G. (2021). An approach to acute diarrheal illnesses in tribal children visiting Balwadis using sector and constitutional homeopathic therapy. Indian Journal of Research in Homoeopathy 2010;4:36-48.
21The authors of the study include Nayak C, Singh V, Kh Singh, and others. The purpose of this randomised controlled experiment is to determine if one of thirteen predetermined homeopathic medicines is effective in treating acute rhinitis in children. Proceedings of the International Journal of High-Dilution Research 2010; 9:30–42.
22This work was carried out by Nayak C, Singh VP, Singh H, and others. A prospective multicenter trial to determine the efficacy of a set of homoeopathic remedies for the treatment of acute bronchitis patients. International Journal of Biomedical Research 2010; 2:9–14Authors: Grimaldi-Bensouda L, Bégaud B, Rossignol M, and others.... Primary care antibiotic use and alternative medicinal practices for treating upper respiratory tract infections: the EPI3 cohort study in France 2007–2008. This includes homoeopathy. Published in 2014 by PLoS One with the DOI 9: e89990.
24My name is Jordan L. Is it possible to use homeopathic medication to alleviate teething pain? Australian Journal of Holistic Nursing, 2005, 12: 35–39 25Handbook of Homoeopathy for the Care of Mothers and Children, Third Edition, 2009, 26th Edition, Central Council for Research in HomoeopathyGovernment agency responsible for AYUSH. The Gentle Science of Homoeopathy. 2015, 27Office of the Registrar General & Census Commissioner. The Indian government's department responsible for domestic policy. This information is accessible at:
http://censusindia.gov.in/Census_And_You/Administrative_division.aspx. Retrieved on September 29, 2017Ministry of Health and Family Welfare. Plan for the Execution of the National Rural Health Mission from 2005 to 2012. Indian government agency responsible for health and family welfare. You may get it at: http://nhm. gov.in/images/pdf/about-nrhm/nrhm-framework-implementation/ nrhm-framework-latest.pdf. September 29, 2017Resource Center for National Health Systems. ASHA. What's the Next Step...? Review of the ASHA program, 2011(executive summary). It may be accessed at: http://www.nipccd-earchive.wcd.nic.in/sites/default/ files/PDF/Evaluation_of_ASHA_Program_2010-11_Executive_Summary.pdf. Retrieved on September 29, 2017Evaluation of ASHA workers' functions in Karnataka's Bijapurtaluk, by Shashank KJ and Angadi MM. The article "Indian Journal of Pharmaceutical and Biomedical Research" from 2015 ran from page 78 to 80.

1 1An initiative to improve health care in rural areas. ASHA Health Education Unit 7. Ability to save lives. You may get it at: http://nhm.gov.in/images/pdf/communitisation/asha/book-no-7.pdf. Retrieved on 29 September 2017.
2Central Council for Research in Homoeopathy. An ANM/ASHA and AWW training handbook on teething health promotion using homoeopathy, 2015, 3The relationship between tooth count, dental age, and

development (Hagg & Taranger, 2018). The published article "Angle Orthod" from 1985 covers pages 93 to 107.

4S. Singh, P. Kalra, R. Karwasra, A. Khurana, R.K. Manchanda, and Y.K. Gupta. Studies on the acute, subacute, and chronic toxicity of homoeopathic medications in rats. Indian Journal of Research in Homoeopathy, 2017;11:48-57

5Written by Poureslami H, Asl Aminabadi N, Sighari Deljavan A, and colleagues. When did the first permanent tooth come in, and is it at the same time as the first primary tooth? We conducted a cohort study that lasted 9 years. The citation for this article is J Dent Res Dent Clin Dent Prospect 2015;9:79-85.

6Asawa K., Kakatkar G., Nagarajappa R., Bhat N., Prasad V., Sharda A. A preliminary research on parental perceptions around teething in children in Udaipur, India. The article "Braz Oral Res" from 2012 appeared in volume 26, pages 151–157.

7J.P. Habicht, C.G. Victora, and J.P. Vaughan. Plans for assessing the efficacy, credibility, and likelihood of public health program outcomes. The International Journal of Epidemiology, 1999, 28:10-18.