Breastfeeding Promotion by Breastfeeding Promotion Group, Kerala University of Health Sciences, Kerala, India

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Abstract

Declining trends of breastfeeding are recognized as a striking reality in Kerala. This is in contrast to remarkable infant mortality reduction and overall social development in terms of NITI AAYOG ranking. The main objective of this paper was to come out with an advocacy tool with an explicit stand on a topic of high social good namely breastfeeding promotion in the form of a position paper. Constitution of an interest group namely ‘Healthy step initiative for breastfeeding promotion’, scoping review using standard search strategies, stakeholder consultations, and consensus position statements. The rationale was justified using available current statistics (exclusive breastfeeding-55%). The literature search helped to identify the priority action points like, technology adaptations, intensified information-education-communication activities, and professional updating. The importance of research was highlighted and critical windows for intervention in a life-course trajectory were identified.

Keywords: Breastfeeding promotion; Kerala University of Health Sciences; Exclusive breastfeeding; Mother baby-friendly hospital initiative; Kangaroo mother care; Infant milk substitute

Abbreviations: IAP: Indian Academy of Pediatrics; NNF: National Neonatology Forum; KFOG: Kerala Federation of Obstetrician and Gynecologists; WIMA: Women’s wing of Indian Medical Association; KUHS: Kerala University of Health Sciences; NITI AAYOG: National Institution for Transforming India

Introduction

Breastfeeding is the most cost-effective health promotional technique and maximum beneficial intervention for the mother and the baby [1]. It also ensures technically sound and scientifically appropriate nourishment, achieving cultural parity and equality for human beings.
The state of Kerala is in the phase of rapid mortality decline and fast epidemiologic transition. Though the infant and under-five mortalities are low compared to the rest of the states in the country, breastfeeding rates especially exclusive feeding rates are not improving as per expectations (see table-1). Hence, the Govt. of India has started the breastfeeding promotion program and the Infant young child nutrition (IYCN) programs [2]. This initiative is upon such a call for action as well as sustained efforts in the community.

**International Scenario**

Just like the Innocenti Declaration (UNICEF) in 1990 and 2005, the launch of the Baby-Friendly Hospital Initiative (BFHI) program, and further modifications into the Mother Baby-Friendly Hospital Initiative (MBFHI) program, there have been international efforts to sincerely promote breastfeeding promotion [3]. The latest efforts are on reviving the original BFHI program and strengthening the mother component of it. Allies working on this mission include WHO, UNICEF, UNESCO, ILO, UNFPA, UN Women, International Baby Food Action Network (IBFAN), the World Bank [4], and professional associations like International Pediatric association, Dedicated networks like Breastfeeding promotion groups, etc.

The Landmark series on breastfeeding promotion in Lancet paved the way for wide academic discussions [5]. Multiple indicator cluster survey was another international effort on situation analysis [6]. Breastfeeding has been identified as a right of every mother and baby and the legal framework for protection is important in this regard. The report by WHO, UNICEF, and the IBFAN discusses laws to promote breastfeeding [7].

**Indian Breastfeeding Promotion Scenario**

The infant food substitutes feeding bottles and infant foods (Regulation of production, supply, and distribution) act, 1992 was a remarkable milestone in the legal protection of breastfeeding in India. This act was subsequently updated by suitable amendments in 2003 and the progress of implementation is monitored by the national level steering committee [8].

There is ample evidence available at our fingertips for a multitude of interventions supporting breastfeeding promotion and the evidence base has been already established [9]. So on now we have strong support groups in the form of credible Non-Governmental Organizations (NGOs), Networks, and noteworthy institutional mechanisms or programs. At the national Governmental level also breastfeeding promotion is a visible priority which is quite evident from the national programs and directives to start state-level initiatives. The Govt. has programs like MBFHI, MAA (Mothers’ Absolute Affection) Program, Infant and Young Child Nutrition (IYCN), Sampushta Keralam-Poshan, etc.

**Breastfeeding promotion ecosystem in Kerala**

Kerala state is the one with maximum educational status, especially for women and everybody expects high breastfeeding rates. Traditionally the state is supportive of the breastfeeding practice as evidenced by the art pictures and sculptures [10]. Kerala was the first state to declare a baby-friendly state in the country [11]. Few are aware of the international recommendations as well as the BFHI initiative also. Still, the breastfeeding rates are not satisfactorily progressing. There have been disturbing comments about this decline and Govt. is already taking steps to improve the status. The State Govt. also takes it in a mission mode and expressed its commitment through Govt. of Kerala initiatives on Infant Mortality Reduction (IMR). The state government shortlisted breastfeeding as a candidate-intervention in the quality statement for IMR reduction. 20% of the Neonatal mortality rate and 13% of the under-five mortality rate is attributed to lack of breastfeeding [12].

In spite of all these efforts, the disturbing reality i.e. the declining trend in indicators of successful breastfeeding practice in the community continues. This is paradoxically observed in states like Kerala where sizable infant mortality reduction has already happened. Table 1 shows that the exclusive breastfeeding under the age of 6 months in Kerala is 55.5% which is less than that of the NFHS-3 (56.2), but the trend is improving when comparing the data with NFHS-4(53.3). The DLHS data also showed a decline in the trend when comparing the data of DLHS-4 to DLHS-3 (23.6 to 21.3).

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<tr>
<th>Rates</th>
<th>NFHS 1</th>
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<td>Children under the age of 3 years breastfed within one hour of birth (%)</td>
<td>14.2</td>
<td>42.9</td>
<td>55.4</td>
<td>64.3</td>
<td>66.7</td>
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<td>Children under the age of 6 months exclusively Breastfed (%)</td>
<td>75.6-14.5</td>
<td>88.3-8.5</td>
<td>56.2</td>
<td>53.3</td>
<td>55.5</td>
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<td>Children aged 6-8 months receiving solid or semi-solid food and breast milk (%)</td>
<td>96.7-92.2</td>
<td>89.3-85.9</td>
<td>93.6</td>
<td>63.1</td>
<td>71.3</td>
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<td>Breastfeeding children aged 6-23 months receiving an adequate diet (%)</td>
<td>96.7-54.4</td>
<td>89.3-56.5</td>
<td>87.5-78.5</td>
<td>21.3</td>
<td>23.6</td>
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Table 1: Breastfeeding rates of Kerala State as per NFHS (National Family Health Survey) and DLHS(District level Household Survey) Data [13] Data from NFHS-1, Page No. 168-172, NFHS-2, Page No. 148-153, NFHS-3, Page No.77-79, NFHS-4: Kerala key indicators, Page No-3, NFHS-5, Page No.117-122.
Table 2: Infant Mortality Rate of Kerala State [14].

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<tr>
<td>Per 1000 live births</td>
<td>14</td>
<td>15</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>12</td>
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<td>10</td>
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Breastfeeding as a modifiable behavior and how the declining trend happened

Breastfeeding is human behavior and hence is natural to happen in a non-Inhibited setting. This traditional practice was almost universal [19]. The problem now is difficulty in adapting this behavior in day-to-day life. It is known that modern life includes changed employment settings, family systems, cultural practices including dressing style, entertainment practices, market pressure through advertisements; changed means of transport and travel, new opportunities for career development including higher education opportunities, and above all changed aspirations about life and relationship dynamics in the community. This has resulted in a new culture with many inhibitions for the initiation and sustenance of this natural act. These inhibitions prevailing in modern social life operate to result in the lost world of this natural blessing. Thus the new order of not giving breastfeeding becomes a preferred choice of convenience or adaptation to the changing workplace or social life.

The Health System and profession are again to be blamed

The health system and health science professionals have been making umpteen efforts but not sufficient enough to counter the push and pull that has happened to sustain this decline in breastfeeding rates in our society. Yet the seminal brunt of this responsibility for protecting society toward universal breastfeeding situation is attributed to the health system. In the prevailing yet inhibiting environment, the social marketing efforts for promoting breastfeeding become shallow cries in the wilderness. The role of the health science profession has been underscored in many situations [20]. Years ago David Morley said that one of the major reasons for the lack of satisfactory levels of breastfeeding is the passive attitude that the medical profession held. This stands true even now and the question is: Are the health science professions showing enough expressed commitment as they ought to be showing in this regard? The profession includes mainly doctors, nurses, and pharmacists. The practitioner or clinic level interface is the most directly important encounter [21] because this is the crucial time point of maximum acceptance for the ‘mother—mother-in-law—grandma’ triad and if not appropriately handled to implement the positive message of breastfeeding promotion, the best opportunity for such a noble intervention will be missed forever.

Going beyond the health system, especially the facility level, have we been successful in popularizing the positive messages regarding breast milk promotion in the community?: is a big question. The IEC interface is the principal means of motivation for changed behavior and the Government has considered IEC activities as an important priority. Still, there is a criticism that our young mothers are not getting sufficient information in crucial times so that they just fall prey to adverse influences. The baby also easily gets accustomed to new practices and in fact, gets tummy full in a more effortless way thus everything going in the direction away from the ideal.

The international academic community is vigilant about this and that is why monitoring tools like the global breastfeeding scorecard have been developed [22] (Figure 1).
**Methodology**

**Position Paper: What is it about?**

A position paper is an update on the knowledge base of that subject at that time of release. It is a piece of document for advocacy. Advocacy is critical for breastfeeding promotion. Persons in key positions like medical superintendent, CEO of workplace, or law enforcement establishment, are primarily at the stake for not taking sufficient interest to sustain the promotional efforts. Similar position papers are available and more than simple academic documents they act as policy documents for health promotional efforts [23-27].

**In short the position paper**

- Makes it clear the stand or position of that agency on that particular issue, which decides the popular mandate of that agency or organization.
- Is a technical document based on evidence-informed policy prescriptions.
- Reflects the cultural ethos of that region and hence the flavor of the community will be ingrained in it.

**Steps of the development of position paper**

**Constitution of the team:**

Multi-skilled team of pediatricians and nursing faculty was constituted. We have invited selected experts for a consultative summit and assembled an interest group. The membership to this group was open to all interested health care professionals working with University. The platform was primarily for resource sharing and consequent academic discussions intended to develop a draft position paper. The team consisted of public health experts from academic community medicine departments, pediatricians from the periphery as well as medical colleges, Nurses, pharmacists, and administrators.

A community perspective initially targeting institutions and integrating with peripheral programs was undertaken for the exercise. Since the healthcare professional is the bridge between the available scientific knowledge base and the recipient community, we wanted to target the healthcare professionals, pediatricians, nurses, neonatologists, and obstetricians being our first target.

**Defining the mandate of this initiative**

Enough and more resources in the form of published literature, electronic resources, and training opportunities are now in existence. The main mandate of this mission is to facilitate the use of these resources and to translate available evidence to action to the maximum possible extent for the benefit of society.

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**Figure 1:** Current rates and targets of breastfeeding.

UNICEF and World Health Organization (Score card 2021)

- Calls to public health actions are expected for a specific period after which they will be updated.

### Methods

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**Figure 1:** Current rates and targets of breastfeeding.

UNICEF and World Health Organization (Score card 2021)
This mandate mainly targets capacity building focusing on human resource strengthening or competence building. That means we are more interested in improving the performance efficiency of health care workers by skill up-gradation, alliance building, and identifying partners of the alliance. The like-minded individual institutions and organizations were contacted by the school, and expression of interest was shared. Conflict of interests was discussed and appropriate strategies of interventions and their feasibility were further discussed.

**We approached the problem through four key strategies**

**Critical windows of opportunity in a life-course trajectory**

The baby and mother are functionally inseparable and so is the importance of the dyad concept. The natural history approach to a woman’s experience with critical windows for intervention in the trajectories needs to be considered. Setting a positive mindset from early childhood days is crucial. Now in Kerala, almost 100% of deliveries happen in institutional settings [13]. Preparedness for breastfeeding is the first thing to focus on from the first contact point. Even before that, a positive and willful attitude to start and sustain breastfeeding needs to be developed as an inevitable part of the prevailing culture. This helps to engender an utmost sense of determinism and passion for the art of breastfeeding for the mother when she is due to provide it. Adolescent immunization points are perhaps timely action points.

The antenatal period is the next window of opportunity. Antenatal education targeted to breastfeeding promotion need to be customized to individual requirements in a counseling approach.

The next crucial time point is the facility for parturition. Every location like the antenatal ward, the labor room, postnatal all are equally important. Initiation and establishment of successful lactation are the crucial action points.

Time of discharge is the next crucial time point and the next is the time of post-partum clinic visit. During each visit of the health functionary at the house there is an opportunity to ensure that everything goes fine for successful lactation.

**Family level focus for interventions**

The negative influences on breastfeeding practice need to be countered with public health action focused on the family level, customized to the locally prevailing culture. The importance of family-focused interventions is cleared by other position papers [28]. The importance of interventions targeted to grandmothers has been proved to be working to facilitate breastfeeding practices. Grandma’s influence can vary from culture to culture [29]. The role of the father in breastfeeding promotion has been well established through recent studies [30].

**Engendering research platforms and translating research evidence to policy action framework**

During all our meetings of the interested faculty, one of the opinions shared was that the thesis topics of postgraduates in the University affiliated institutions are now less and less on breastfeeding and related subjects. This is reported to be seen both in the hospital as well as in the community settings. This is a real paradox. On the one hand, there is an urgent need for research because of the disturbing decline in trends of breastfeeding, and on the other hand, less research is happening is certainly an unfortunate situation. One of the appeals of the assembled faculty was to initiate steps from the part of the university to promote research on breastfeeding promotion. International literature also says the same thing i.e., about the data gaps [31]. Program-based research is another important priority. A realistic evaluation of the BFHI in India is yet to be done. Whether the implementation of this program was sufficiently documented in this country is a genuine question. There are criticisms about the program at the global level [32].

**Prioritizing actions based on documents** from credible breastfeeding promotion agencies (like WHO), Research evidence (from literature), focusing on the low hanging fruits:

**Multi-dimensional approach of interventions**

Every behavior change platform needs to be utilized for breastfeeding promotion and this should be the concern for all with health professionals being placed as role models. Multiple strategies like advocacy measures, legal enforcements, care and support of the mother, etc. need to be attempted by everybody concerned at every window of opportunity.

**Newer technology adaptations and appropriate use of technology**

The technology breakthrough needs to be exploited maximum, especially in areas of storage-pooling and sharing, of expressed human milk (the same technology adaptations we used for processing and marketing non-human milk).

**Key Action Points**

**Clinical Lactation support: Use of Breast Pumps**: Breastfeeding in special situations may need the mother to express milk and the use of Breast Pumps has helped to improve exclusive breastfeeding rates in mothers of preterm or sick new-born. Handling and storage of breast milk have to be diligently taught and observed. Pooled human milk is being available through Human Milk banks and has definitely helped those babies whose mothers are not able to provide milk, especially in the initial days of life.

**Popularization of Kangaroo mother care (KMC), Rooming-in,
and **Zero separation** are practiced as part of the MBFHI program and Kangaroo mother care is being popularized by practicing neonatologists and pediatricians. But universalization of these practices and insisting as part of standard care need to happen yet. KMC is an old concept that started in Colombia in 1978. But this has not been popular in all delivery settings. Lot of discussions happen in academic settings about KMC and the advantages for neonatal survival of preterm and low birth weight babies are again and again openly discussed. Similarly, maintaining skin-to-skin contact is also vital for establishing successful lactation [33].

**Sustained and ‘high voltage’ Information Education Communication (IEC) activities:** Positive messages to be widely disseminated - Every opportunity to be utilized for motivating young mothers. Though there are programs and policies, how far the message is reaching the common man is the question. Moreover, health functionaries need periodic updating of their knowledge and motivation for continued action. Every year the wake-up call comes in the form of breastfeeding week celebrations and the sustainability of this spirit of enthusiasm need to be maintained for the rest of the year.

**Knowledge and skill up-keeping of the healthcare professionals:**
During one of our consultative meetings one senior practitioner made a statement like this “The healthcare professional is not doing their duty because they themselves are not convinced about the need for breastfeeding promotion”. Most of the other discussants agreed to this. This warrants sensitization, motivation, and competence building of health care professionals. A growing line of research has highlighted that e-technologies may play a promising role in improving breastfeeding outcomes [34]. One of the salient features of the present century is the technical support for every walk of life. For successful breastfeeding outcomes, web-based interventions have been proved to be useful. One Cochran review noted that providing telephone support for breastfeeding increased Exclusive Breast Feeding at six months [35].

**Achieving more community participation:** Program implementation with more community participation is needed. At the Governmental level, programs are initiated and planned with much enthusiasm, but continuity and overcoming the barriers without program fatigue are crucial [13]. We sincerely vouch that every activity should be appropriately integrated with the routine functioning of the health system ensuring continuity. The state-level initiatives on Sustainable development goals (SDG) are timely windows to integrate breastfeeding promotional activities with the health system.

**Support to MBFHI activities**

a. Dedicated counselors for care and support of lactating mothers:
Now almost all deliveries are happening in the institutions and the antenatal outpatient sections are quite busy. A separate cadre of lactation counselors is a routine in many developed countries. This group can be nurses after a brief certificate course. They need to be posted.

b. Helping to revamp the institutional certification procedures: Though started with a great legacy, the BFHI program faced unparalleled ‘program fatigue’, and efforts for revamping started late. After the gap of two decades of relative complacencies, the program is now being revamped.

**The way forward for the University:** In short, the University has the following commitments to express its social accountability through this important key policy intervention.

a. Key interventions through necessary modifications of curriculum for various courses

b. Conducting dedicated courses in breastfeeding biology, behavioral aspects, and promotion techniques. The lactation management counselor course is an example.

c. Having the largest number of health care workforce either as grooming or as an established cadre their sensitization and motivation are mere obligations of the University.

d. Enforcement of all legal measures for successful lactation practice promotion in the college campus.

e. Undertaking research in the key policy areas related to breastfeeding

**Conclusions and challenges ahead**

Breastfeeding promotion is an urgent need for society and all efforts at every nook and corner of society are needed for sustaining the already achieved gains in this regard. Every effort should be undertaken in a partnership model with the involvement of multiple stakeholders and through appropriate and vivid strategies in a coordinated manner. Technology adaptations in resource-limited settings and cost-intensive investments are major challenges identified. BFHI is a hospital-centered program and this limitation can be surpassed by considering it as starting point for community-level actions. Other challenges in achieving universal lactation are evidence gaps between policy and action, addressing the implementation barriers of programs for promotion in the community, understanding and harmonizing the agenda of academia and policy, and finally revamping an effective breastfeeding promotion culture in the community.

**References**


2. Infant and Young child nutrition program, USAID, 2011.


11. Children in Kerala, UNICEF for every child, India; 2020


