Baby-Friendly Community Initiative Program – Development of a new breastfeeding GPS app

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31st May, 2021
Brief History of BFHI policy in HK hospitals

- **2006**: HK Government Announces Infant Formula Policy
- **2010**: Hospitals begin to pay market price for infant formula
- **2013**: HK Government announces all public hospitals to become BFHI in ~10 years
- **2016**: 1st public hospital BFHI designated
- **2018**: 2nd public hospital BFHI designated
- **2019**: 3rd public hospital and 3 MCHCs BFHI designated
- **2020**: 5 remaining public hospitals and 1 private hospital commit to BFHI designation
Summary of the Impact

Research results from us and others indicate that BFHI, a ten set of maternity practices that hospitals implement contributes to increasing initiation, exclusivity and duration of breastfeeding. Our research provide key evidence for Hong Kong government to promote and support breastfeeding.

Whether the global program BFHI should be implemented in the community has been a contentious issue.

There were concerns on difficulty to breastfeed in public and find breastfeeding facilities in Hong Kong. Our team have been working to share and transfer knowledge based on evidence-based findings, to develop a Breastfeeding GPS App, comprehensive territory-wide information on baby care/breastfeeding friendly facilities and have achieved significant impacts in the following areas:

1. Policy and Guidance
2. Behaviour Change
3. Public awareness
4. Community education
5. Mobile App usage
Underpinning Research

• We have been studying the underlying factors affecting breastfeeding, its epidemiology, cessation, promotion and policy interventions since 2005. Hong Kong has high initiation rates, with 90% of women breastfeeding upon discharge from the hospital. However exclusive breastfeeding rates at 6 months was 29%. This fall short according to the WHO target to increase exclusive breastfeeding rate globally during the first six months, to 50% by 2025.

• We demonstrated the effect of 2006 hospital policy to no longer accept free infant formula products and the impact of designation of BFHI hospitals in 2016 on breastfeeding outcomes.

• The next step was to translate the BFHI steps into the community and commercial sector in conjunction with a comprehensive territory wide App on breastfeeding friendly care facilities. This was based on a qualitative exploratory study and needs assessment among mothers and public sector’s views of difficulties experienced breastfeeding in public.
Summary of BFCI Program

A 3 year program: outreaching to 2,000 mothers and 2,000 staffs and management

• Breastfeeding seminars and workshops
• Ongoing training workshops for public venues
• Community engagement and promotional activities

• Development of a breastfeeding GPS app
Engagement Process

We engage with the government, industry, media and the public through the following means:

1. Scientific publications and report
2. Providing advice in the expert advisory group of Breastfeeding Promotion Committee, Department of Health.
3. Sharing knowledge in seminars and workshops and health & baby expos and public venues.
4. Media interviews
5. Organising KE workshops and online communications for mothers and public (live dialogues, videos, Q&As)
Engagement: Cross sector collaboration
Engagement

2. Public Awareness

II. Training workshops for staff and management

175 outreach to shopping malls and premises. As of May 2021, there are 62 pledged premises with a total of 600 participants.
Engagement

3. Community Education

II. Community Breastfeeding events and workshops

III. News Media Interview
Impacts Achieved

1. Adoption of Policy Guidance

I. Sharing for professional bodies and government working groups

• Committee on Promotion of Breastfeeding
• Department of Health, Hospital Authority (HA) with obstetric units and Maternal Child Health Clinics (MCHCs) support and adopted BFCl program into video resources for public.

I. Contributed to business breastfeeding promotion and behaviour change

• As of May 2021, we outreached to 175 shopping malls and premises. There are 66 that joined BFCl program and 62 enlisted Breastfeeding Friendly Star Premises. Among these 12 premises were newly enlisted and 14 shopping malls has modified their breastfeeding rooms after joining BFCl program.
Impacts Achieved

2. Behaviour Change:

I. Shopping mall broadcasts on public view of the bfGPS app – 2 shopping mall have adopted this video.
Impacts Achieved

2. Public Awareness and reach

Social Media

- 1,639 likes, 242 shares
- 1,718 followers (69% Hong Kong, 30% Taiwan)
Impacts Achieved

2. Increased mother’s breastfeeding confidence

I. Delivered BFCl program to 821 mothers.

II. Significant 12% increase in mothers’ breastfeeding self-efficacy.
Impacts Achieved

3. Community

II. The app was ranked no.3 in Hong Kong App’s store’s “Health & Fitness” free apps category after launched date.
Impacts Achieved

3. Community

III. Rated as “Top 6 Must have app” for pregnant women
Breastfeeding GPS application (bfGPS app)
- Phase I: Launched in September 2020
- The app in May 2021 has over 2500 downloads, reached Hong Kong, Taiwan as well as outside Asia (UK, Australia and Canada)
- 169 users registered and 60 submitted facility ratings.
Impact Achieved:

Mobile App: Behaviour Change

- 1.4K+ users used the app to locate breastfeeding facilities
- All users performed 54K+ facilities searches
  - 22K+ for searching nearby facilities with the user’s GPS location.
  - 32K+ for searching with a specific district or landmark name.
  - Each user searched 37 times on average
  - Each session of app usage involved 4.8 searches on average

- Nearest Breastfeeding facilities location based on GPS function
- Categorised into shopping mall, hospitals, leisure facilities, MTR, government facilities.
Impact Achieved: Mobile App: Behaviour Change

- All users viewed facility details for 20K+ times:
  - Each user viewed the detailed information of 14 facilities on average
  - Each session of app usage involved 4.8 searches on average.

- Click and view photos, location, ratings and reviews
Summary: Impacts Achieved

1. **Policy and guideline:**
   Contribution to Breastfeeding Promotion and Strategic plan in government as well as business and marketing industries. BFCI program and app adopted by Family Health Service.

2. **Behaviour Change:**
   12 Breastfeeding premises were newly enlisted.
   14 shopping malls has modified their breastfeeding rooms.
   Increased mother’s breastfeeding self-efficacy.

3. **Community education:**
   Educating thousands of local mothers, staff and management and public.

4. **Mobile App development:**
   The first Breastfeeding GPS App was developed and changed behaviour. Expected impact will be to evaluate the ratings, comments and number of updates from users.
Thanks to our collaborators

Co-investigators: Professor Hextan Ngan, Dr Patrick Ip, Dr Noel Shek, Dr Janet Wong, Ms. Christine Lam, Professor Marie Tarrant

Students and collaborators:
All the Student Ambassadors of University of Hong Kong School of Nursing

HKU Team: Professor Chia-Chin Lin, Dr Daniel Fong, Dr Heidi Fan, Mr Cheuk-Wang YAU, Ms Emily Leung, Ms Heidi Yeung

Queen Mary Hospital: Ms Angel Tam, Ms Doria Tin

Department of Health: Dr Rachel Cheng

Natural Parenting Network: Ms Vicky Tsang, Ms Sharon Tsui, Ms Simmy Li and Mother Ambassadors

Hong Kong Breastfeeding Mothers’ Association: Ms Jacy Chan, Ms Hoi Yee WO, Ms Wing Yan TANG