Identification and classification of interventions that promote, protect, and support breastfeeding

Richmond Aryeetey[1], Faustina Gyimah[1], Robert Akparibo[2], Faith Agbozo[3]

[1]University of Ghana, [2]University of Sheffield, [3]University of Health and Allied Sciences

THE GLOBAL HEALTH NETWORK CONFERENCE SOUTH AFRICA 2022

Background

Breastfeeding (BF) is globally recognized as a critical intervention for child survival. However, breastfeeding practice remains inconsistent and sub-optimal, globally. Unlike in developed countries, developing countries lack resources to generate empirical evidence to support science-based decision-making on optimal breastfeeding. Much of the existing evidence is generated in developed country settings and published in journals that may not be accessible easily to decision-makers.

The *Best Practice Interventions* project seeks to create a living database of studies reporting evidence for promoting, protecting and supporting breastfeeding, globally. The current study (an evidence review) will form the basis for identifying and classifying the reported evidence in peer-reviewed journal articles. Ultimately, the study aims to improve access to existing effective interventions and best practices, while limiting the burden of accessing this evidence.
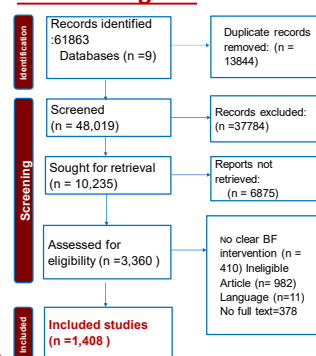
Findings

Source country of included studies: USA- 26.8%; UK- 4.9%; Brazil-4.8%; India-4.8; Australia-4.3%
Study design of included studies: RCTs - 32%; Quasi-Experiment - 15.3%; cross-sectional: 22.9% -
Study period of included:
  Before year 2000: 7.2%
  2000-2010: 17.7%
  After 2010: 75.1%
  After 2014: < 50%

Prisma Diagram

Identification
Records identified :61863 Databases (n =9) → Duplicate records removed: (n = 13844)

Screening
Screened (n = 48,019) → Records excluded: (n =37784)
Sought for retrieval (n = 10,235) → Reports not retrieved: (n = 6875)
Assessed for eligibility (n =3,360) → No clear BF intervention (n = 410) Ineligible Article (n= 982) Language (n=11) No full text=378

Included
Included studies (n =1,408)

Research Question

Across all societal targets (eg mothers, caregivers, families, communities, institutions, health care providers, and other actors involved with maternal and care), which '**Intervention *'strategies'*** or *'Exposures'* have been successfully utilized to promote, protect, and support breastfeeding practice during the first 24 months of life, in low-, middle-, and high-income countries?

Methods

➤ **Design**: Scoping Review methodology
➤ **Search Strategy:** Population, Exposure and Outcome (PEO) framework; Search in English language databases: Medline/Pubmed, Cochrane Central, CINAHL, SCOPUS, Google Scholar (via Publish or Perish), WHO ELENA (Evidence Library), EMBASE, Index Medicus.
➤ **Inclusion criteria:** Human-related studies, 'intervention-focused' studies, published between 1970-2021, accessible online, published in English Language
➤ **Exclusion criteria**: non-biological mothers, twins & multiple births.
➤ **Primary outcomes:** Early initiation of BF, Exclusive BF, Continued BF until 12 months, responsive BF on demand
➤ **Secondary outcomes**: Knowledge, attitudes, policies, political economy, financing, promotion, advocacy, coordination of BF programs
➤ **Classification of paper**: Technical content of intervention and implementation considerations

Figure 1: Taxonomy used for classification

Journey	Ecosystem	Activity Cluster	Intervention type
• Menarche • Conception • Pregnancy • Birth • Initiation • First 6 months • Back to work • 2 years	• Society • Community • Healthcare • Education • Self • BMS • Employment • Influencers	• Attitudes • Knowledge • Maternal health • Infant health • Legal/policy • Resources • Common practices	• Promotion and education • Counselling and support • Training of care staff • Peer support • Counter marketing • Training for peer support • Advocacy • Hotlines • Information resources

Figure 1: Types of interventions in the included studies

% of documents — breastfeeding promotion, BF Counselling, BFHI, Peer Support, training H Staff, information Resources, mother-friendly facilities, breast pump, male involvement, Legislation and policy, advocacy, health setting restructuring, Countermarketing (BMS), Communication (hotlines), BM Banking, training peer support
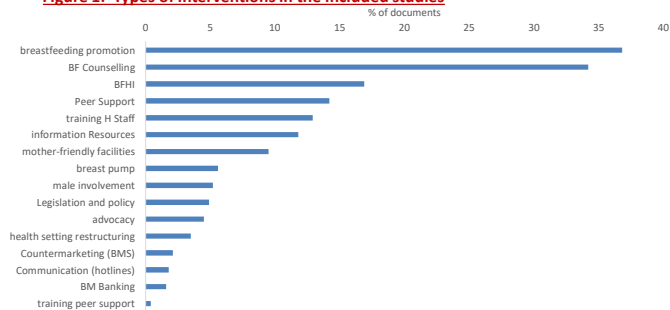
Figure 2a: Clustering by Activity

Class category	Number of documents	%
Attitudes	333	23.7
Knowledge	850	60.4
Maternal health	63	4.5
Infant health	80	5.7
Legal/policy	168	11.9
Resources	230	16.3
Common practices	251	17.8

Figure 2b: Clustering by Journey

Journey stage	Number of documents	%
Menarche	18	1.3
Conception	13	0.9
Pregnancy	386	27.4
Birth	407	28.9
Initiation	478	33.9
First 6 mo	565	40.1
Back to work	57	4.0
First 2 years	129	9.2

Figure 2c: Clustering by Ecosystem

Classification category	Number of documents	%
Society	57	4.0
Community	480	34.1
Healthcare	917	65.1
Education	40	2.8
Self (intrapersonal)	167	11.9
BMS/Formula	3	0.2
Employment	52	3.7
Influencers	6	0.4

Figure 2c: Clustering by communication Channel

% of Documents — Audio messages, Social media Photo, Video with sub-text, Booklet, Telephone, Home visits, F2F

Conclusions

• We identified almost 1,500 published studies on breastfeeding interventions
• We classified the documents based on characteristics using taxonomy
• Created clusters that will enable development of a database that can be upated over time

Next Steps

• Next steps will involve further classification of papers based on implementation requirements of end-users
• Creation of a user-friendly database and user-interface
• Continuous update of the databased with new documents
• Apply ethical principles in the application of the interventions

Funding

UNIVERSITY OF GHANA   **The University Of Sheffield.**   **UNIVERSITY OF HEALTH AND ALLIED SCIENCES**