



# Breastfeeding support: The role of the pharmacist. Feb 12th 2025

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# **Presenter Information**



Dr. Deirdre M D'Arcy is an Associate Professor of Pharmaceutics and Pharmaceutical Technology in Trinity College Dublin, Ireland

Relevant career experience – Hospital pharmacist, PG Diploma in Clinical Pharmacy; Community pharmacist; PG Dip Quality Improvement; PhD pharmaceutical technology; SP Cert Academic Practice.

Teaching: involved in Industrial and Hospital pharmacy relevant MSc programmes; Pharmacy programme (Currently Director of Undergraduate Teaching and Learning)

#### **Current research focus:**



i) Concurrent research in clinical areas such as PK in critical illness/oncology, and ongoing interest in medicines management in breastfeeding patients.



PBPK to determine biopredictive dissolution method

## Presenter information

Dr Aoife Fleming is Senior Lecturer in Clinical Pharmacy School of Pharmacy University College Cork & Vice Head for Interprofessional Learning UCC.

Maximise support for breastfeeding for sustainable population health and wellbeing (**MaxSBF**): HRB funded APRO led by School of Nursing & Midwifery UCC.



#### Research interests:

- Expansion of pharmacist services
- Antimicrobial stewardship
- Medication safety
- Interprofessional education and collaboration







## **Presentation outline**

How can pharmacist/pharmacy help? (Deirdre)

What can be barriers to pharmacy support for BF patients? (Deirdre)

**Information resources (Deirdre)** 

**Breastfeeding education (Aoife)** 

**Competency development and communication (Aoife)** 

**Ongoing research** 

# Pharmacists supporting BF patients...

Several studies have found varying levels of comfort and confidence in pharmacists' ability to provide advice on medicines to BF patients.

- Research from US, Australia...
- (DD -Recent collaboration with Jordan University of Science and Technology)





# Barriers and enablers to pharmacist support

- Survey (NOTE: ~10 years ago)
- 158 parents with experience of breastfeeding completed the full survey
- Focus on one free text question at end of survey –65 comments received:

Identifying barriers/obstacles to offering breastfeeding support services from the community pharmacy.

If you are aware of any barriers or obstacles to the delivery from a community pharmacy of any of the breastfeeding support services outlined in this survey, or any general obstacles you perceive around the role of the community pharmacist or pharmacy in offering support to breastfeeding mothers, please give details in the box below:

**Qualitative analysis: 6 Themes were identified** 

Collaborators:
Rose Duignan
Dr. Suzanne McCarthy UCC
Prof Martin Henman (TCD)

# Barriers and enablers to pharmacist support 1/2

Theme		Examples
i)	Knowledge on Safety of Medication in Breastfeeding	"In my experience, a lot of pharmacists err on the side of caution and say meds not suitable while breastfeeding." (SH49)  "I have found pharmacists (along with other health professionals) to be frequently sorely lacking in up to date information about safety of drugs in breastfeeding, generally going by the packet insert/manufacturer's info rather than a reliable source of facts such as Lactmed, the BFN specialist pharmacist's factsheets, or Thomas Hale. Have heard of far too many women being told they can't take OTC medicines, or worse to wean, "pump and dump", supplement with formula to avoid baby getting "tainted" milk etc. when in fact very few drugs are completely non BF-compatible." (SH113)
ii)	General awareness and knowledge of breastfeeding among pharmacists	"I think the lack of awareness amongst pharmacists is generally in line with the lack of awareness in the general population around bf in Ireland." (SH10)  "General ignorance of breastfeeding, how it works, how good it is, how long is 'normal' to breastfeed, that breastfeed babies don't need topping up with formula" (SH59)  "The pharmacist may not have first hand experience or training with breastfeeding and therefore give advice from "the book" which may not be best advice for individual mothers." (SH146)  "I have had only good experiences when asking pharmacists about meds while breastfeeding, no matter their sex or age. They are sometimes unable to offer alternatives to the medication breastfeeding mothers can't take, but I suspect that is because there aren't any" (SH124)
iii)	Use of other resources	"sometimes lacmed or forums better then pharmacist"(sic) (SH27) "I relied solely on la leche league, lactation consultants and Dr. Jack Newman's books and websiteas well as moral support from other woman on forums like Facebook."(SH49)

# Barriers and enablers to pharmacist support – 2/2

Theme		Examples
iv)	Products and resources available for breastfeeding	"there is also a very small choice of breastfeeding related products in small chemists" (SH10) "Stock pharmacists with a wide range of nipple shields, breast pads, good breast pumps (not the ones that leave you pumping for 30 mins to empty the breast), nipple soothing products" (SH28)
v)	Conflict of interest	"There is also a lot of scepticism about pharmacy's independence due to sponsorship by pharmaceuticals and formula companies" (SH13)  "Their primary goal is to make a profit. So I would see it as a conflict of interest for them to be "diagnosing" or recommending particular breastfeeding solutions that involve buying products (such as nipple shields, buying/hiring breast pumps, etc.)" (SH9)
vi)	Role of the pharmacist as a resource for breastfeeding	"I associate pharmacist with treating sick people. Breastfeeding is not an illness so wouldn't put the two together". (SH163) "I wouldn't support nutritional advice being given by pharmacies." (SH88)

# Sources of information on medicines use

ARTICLE

## while BF

A Comparison of FDA and EMA Pregnancy and Lactation Labeling

Dana Kappel<sup>1,\*</sup> , Leyla Sahin<sup>2</sup>, Lynne Yao<sup>2</sup>, Shannon Thor<sup>3</sup> and Sandra Kweder<sup>1</sup>

CLINICAL PHARMACOLOGY & THERAPEUTICS | VOLUME 113 NUMBER 6 | June 2023

#### 2 Considerations:

- 1. What sources of information are available for pharmacists, and how to interpret this information?
- 2. What sources of information has the mother already used, and how has she interpreted this information?

https://www.sps.nhs.uk/articles/advising-on-medicines-during-breastfeeding/

https://www.sps.nhs.uk/articles/questions-to-ask-when-giving-advice-on-medicines-and-breastfeeding/

https://www.sps.nhs.uk/articles/information-resources-for-advice-on-medicines-and-breastfeeding/

https://nmiccomms.newsweaver.com/eohpv2ez1d/1134y6v08y5

#### Contents

Developing your advice

Minimising side-effects in the infant

- Simplify the mother's medication
- Offer alternatives
- Medicine factors to consider
- Timing of feeds

Monitoring the infant

Communication

Expert advice

Update history

#### **Developing your advice**

Once you have completed a risk assessment of the medicine(s) in breastfeeding, you are ready to provide advice. The overall aim should be to allow the mother to continue breastfeeding where possible, whilst taking the most appropriate treatment.

In the majority of cases this will be possible, particularly if you have based your risk assessment on the advice we provide. However in some cases, where medicines **cannot** be continued as normal whilst breastfeeding, you may need to suggest different options.

#### Minimising side-effects in the infant

Risks to the infant should be reduced whilst protecting the breastfeeding relationship.

#### Simplify the mother's medication

Avoid unnecessary medicine use, including self-medication.

In general, the less medicines a mother is taking, the less risk to the infant. If a mother is taking medicines during pregnancy, review these before delivery and consider whether the medicine could be stopped, or if non-medicinal options could be used instead.

#### Offer alternatives

In some cases, an alternative medicine or formulation may be safer or have more evidence for its use. This could include changes to the route of administration.

#### Importance of the risk assessment

- Challenges of the risk assessment

#### Importance of asking questions

- Identifying risk factors
- Informing risk versus benefit assessment

#### Gathering and using information

- Ask about the mother
- Ask about the infant
- Ask about medicines and therapies
- Look at the evidence
- Complete the risk assessment
- Make a decision
- Seek further advice

#### Checklist to download

Update history

throughout pregnancy.

#### Gathering and using information

The information you need to establish if medicine(s) are compatible with breast feeding and therefore formulate a suitable response to your enquiry indicated in the following sections. You might not be able to get all this information, but it is important to get as much as possible.

We have produced a template on which you can record your findings and attach to the patient records, where available.

Show all steps >

1 Ask about the mother

Show ~

2 Ask about the infant

Show ~

3 Ask about medicines and therapies

Show >

4 Look at the evidence

Show >

5 Complete the risk assessment

Show ~

6 Make a decision

Show ~

7 Seek further advice

#### Advising on medicines during prea

#### Contents

#### SPS Breastfeeding resources

Further information

#### Our top additional suggestions

- e-lactancia
- LactMed
- NHS website: Medicines A-Z
- NICE Clinical Knowledge Summaries

#### Other breastfeeding resources

- BNF
- BNF for Children
- Breastfeeding Network (BFN)
- Briggs' Drugs in Pregnancy and Lactation
- Electronic Medicines Compendium
- GP Infant Feeding Network
- Medications and Mothers' Milk (Hale)
- Medicines Learning Portal
- Unicef Baby Friendly Initiative

#### Update history

#### Other breastfeeding resources

We have provided our views on determining the limitations (if any) of additional resources you might come across when answering a lot of questions about medicine use in breastfeeding.

#### **BNF**

- The BNF statements on use of medicines during breastfeeding are brief and may be based largely on SmPC statements.
- · As such, the information is generally over cautious.

#### **BNF** for Children

In some circumstances it may be helpful to check the <u>BNF for Children</u> to see if the medicine can itself be used
in neonates or infants as this provides reassurance of use in the paediatric population.

#### **Breastfeeding Network (BFN)**

- The <u>BFN</u> is a UK charity which provides support for breastfeeding in general, including a helpline accessed via Facebook
- The website includes patient leaflets on some medicines, however the advice does not appear to be sufficiently evidence-based

#### Briggs' Drugs in Pregnancy and Lactation

- . Briggs is a US publication with information about medicines during both pregnancy and lactation.
- The pregnancy information dominates each monograph with limited information on lactation.
- The level of detail is not usually sufficient or helpful for Briggs to be used as a resource for medicines in breastfeeding.

#### **Electronic Medicines Compendium**

- The <u>Electronic Medicines Compendium</u> (eMC) contains Summaries of Product Characteristics (SmPCs) and Patient Information Leaflets (PILs).
- . This information clarifies the licensed status of a medicine's use during breastfeeding and is not clinical advice.
- Manufacturers generally take a very cautious approach because of a lack of data.
- . These should not be used as a sole information source for these types of medicines-related question.

#### GP Infant Feeding Network

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#### Medicines information resources on lactation

Please refer also to standard medicines information resources.

Title	Content	Website and accessibility
	Includes guidelines for prescribing antimicrobials in lactation.	www.antibioticprescribing.ie Freely accessible
	The Specialist Pharmacy Service (commissioned by NHS England) website provides training and guidance to help decision making about the use of medicines in breastfeeding.	https://www.sps.nhs.uk/home/guidance/safety- in-breastfeeding/ Freely accessible
	This is a Spanish website, with English translation provided. It has a wide coverage of medicinal products with succinct entries and some monographs have short additional notes. Suitable alternatives are given where available.	www.e-lactancia.org/ Freely accessible
	US database which includes monographs on the safety of medicines in breastfeeding.	www.ncbi.nlm.nih.gov/books/NBK501922/ Freely accessible
	A bulletin on the use of medicines in breastfeeding women was published in 2021.	Use of medicines in breastfeeding women Freely accessible
Breastfeeding Network	This is a website that provides evidence- based and practical information for mothers who breastfeed; it has information leaflets on use of drugs in lactation.	www.breastfeedingnetwork.org.uk/drugs- factsheets/ Freely accessible
	This website includes protocols (guidelines) aimed to facilitate best practices in breastfeeding medicine.	www.bfmed.org/ Freely accessible
Medications	Online or print; online content may be updated in between published print editions.	www.halesmed.com Book available to purchase or online paid subscription

# Specific point on meds advice: PK concepts! Timing feeds around medication use

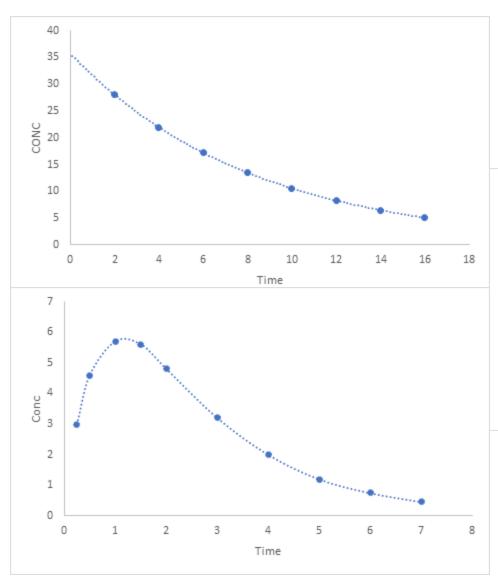
Advice can be along the lines of "Use a drug with a short half life, BF just before taking (or just after if e.g. oral) so that baby is exposed to lowest concentration"... Or if single dose, consider near complete elimination after 4-5 half lives...

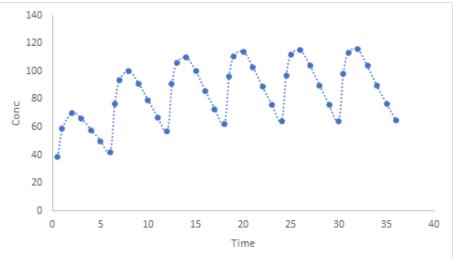
#### **Problems:**

- What is short half life? (t<sub>1/2</sub> 2-3 hrs could be considered short)
- Does waiting "4-5 half lives" after taking the medicine bring us to near-complete elimination? (after taking an oral tablet??)
- Can you time feeds around medication in this way?

Babies feed on average 8 times per day, can be up to 16 times (!), cluster feeding, duration of each feed...

# Consider sample conc-time profiles





# Breastfeeding -ongoing research

#### Own research:

"Theoretically informed and data-driven innovations in medication self-management and breast-feeding" PI Prof Tamasine Grimes, Co-PIs Déirdre Daly (Midwifery), Deirdre D'Arcy (Pharmacy), Juliette O'Connell (Pharmacy), Sam Cromie (Psychology/Human systems) -commenced Sept 2024.

Other -

e.g.

#### **ConcePTION IMI**

https://www.imi-conception.eu

Key objectives of the project

The main goal of ConcePTION is to establish a trusted ecosystem that can efficiently, systematically, and in an ethically responsible manner, generate and disseminate reliable evidence-based information regarding effects of medications used during pregnancy and breastfeeding to women and their healthcare providers. This will be achieved by generating, cataloguing, linking, collecting and analysing data from pharmacovigilance, modelling, routine healthcare, breastmilk samples through a large network.

**Papers e.g.** Van Neste, M., Bogaerts, A., Nauwelaerts, N., Macente, J., Smits, A., Annaert, P., Allegaert, K., (2023) <u>Challenges Related to Acquisition of Physiological Data for Physiologically Based Pharmacokinetic (PBPK) Models in Postpartum, Lactating Women and Breastfed Infants—A Contribution from the ConcePTION <u>Project</u>. Pharmaceutics, 15(11):2618. DOI: <a href="https://doi.org/10.3390/pharmaceutics15112618">https://doi.org/10.3390/pharmaceutics15112618</a></u>

Cardoso, E., Guidi, M., Nauwelaerts, N., Nordeng, H., Teil, M., Allegaert, K., Smits, A., Gandia, P., Edginton, A., Ito, S., Annaert, P., & Panchaud, A. (2023) <u>Safety of medicines during breastfeeding – from case report to modeling: a contribution from the ConcePTION project</u>, Expert Opinion on Drug Metabolism & Toxicology. DOI: <u>10.1080/17425255.2023.2221847</u>

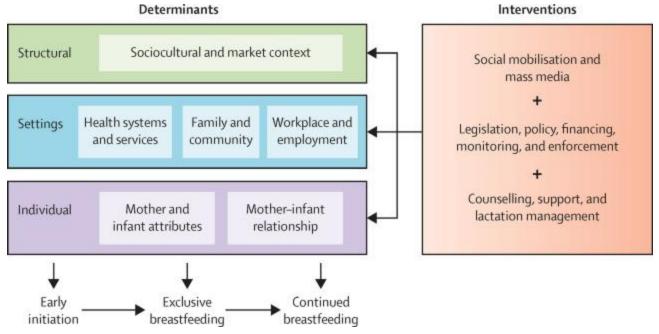


## Breastfeeding support is everyone's business

Success in BF is not the sole responsibility of the mother – Collective societal responsibility

A universal approach to BF support is not embedded in healthcare education.

Baby Friendly Hospital Initiative. UN Hospital Accreditation





# Breastfeeding support from healthcare professionals



Well placed to provide support, however:

- Knowledge and skills gaps
- Healthcare professionals lack confidence
- Organisational challenges in healthcare
- Need for person-centred care
- Marketing of cows milk formula
- Variable Education in BF across healthcare programmes
- Postgraduate training focused largely on midwives, lactation consultants, nurses....less for other professions.
- Interprofessional Education (IPE)







































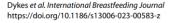


# Why do health care professionals need BF education?

- Women should have access to skilled support and consistent, up to date, evidence-based advice.
- Risk of inconsistent/conflicting/inadequate information
   can negatively impact BF (Dykes 2006)
- Several key groups support BF:
  - health practitioners, including midwives, maternal and child health nurses, medical doctors, healthcare assistants, neonatal nurses, community-based nurses, pharmacists, infant feeding specialists and lactation consultants;
  - trained breastfeeding counsellors from a breastfeeding support organization;
  - peer supporters;
  - o significant others such as family and friends



# Importance of women's views



(2023) 18:49

International Breastfeeding Journal

#### RESEARCH

**Open Access** 

Women's perceptions of factors needed to encourage a culture of public breastfeeding: a cross-sectional study in Sweden, Ireland and Australia



Charlotta Dykes<sup>1,2\*</sup>, Pernilla Ny<sup>1</sup>, Yvonne L. Hauck<sup>3</sup>, Lesley Kuliukas<sup>3</sup>, Louise Gallagher<sup>4</sup>, Vivienne Brady<sup>4</sup> and Christine Rubertsson<sup>1,5</sup>

Online survey: Ireland (n=1597), Australia(n=7602), Sweden(n=1252) Key themes:

- Make breastfeeding visible in society
- Healthcare professionals support and knowledge regarding breastfeeding;
- Education of the public
- Inviting environment



# Breastfeeding education

Vicarious knowledge

**Embodied knowledge** 

Practice based knowledge

Formal knowledge

- Education that incorporate opportunities for
  - Deep reflexive learning
  - opersonal debriefing,
  - high levels of interaction and teaching of basic personcentred counselling skills.
- Offer to pre-registration for all midwives, doctors, public health nurses, and others less directly involved should engage in this education e.g. pharmacists, social workers.



# Interprofessional education to support breastfeeding









## Effectiveness of interprofessional development of foundational lactation open education resources

Suzanne Hetzel Campbell, PhD, RN, FCNEI, CCSNE, IBCLC<sup>a,\*</sup>, Nicole Bernardes, PhD, PT<sup>b,c</sup>, Thayanthini Tharmaratnam, MSN, RN<sup>b</sup>, Melanie Willson, RN, MPH<sup>d</sup>, Claudia Krebs, MD, PhD, FAAA<sup>e</sup>, Kim Campbell, RM, MN<sup>f</sup>, Marianne Brophy, B. Comm, IBCLC<sup>g</sup>, George Oliveira Silva, MSN, RN, PhD(c)<sup>h</sup>

- Open educational resource (elearning)
- >800 students, >300 HCPs
- Consistent approach to BF education for HCPs
- Support needs of diverse families – equity and inclusion lens.
- Efficient & effective learning.

#### RESEARCH ARTICLE

Evaluating interdisciplinary breastfeeding and lactation knowledge, attitudes and skills: An evaluation of a professional graduate programme for healthcare professionals

Denise McGuinnesso<sup>1</sup>\*, Kate Frazer<sup>1</sup>, Karl F. Conyard<sup>2,3</sup>, Paula Cornally<sup>1</sup>, Lauren Cooper<sup>1</sup>, Niamh Vickerso<sup>1</sup>

1 School of Nursing, Midwifery & Health Systems University College, Dublin, Ireland, 2 School of Public Health, Physiotherapy and Sports Science, Dublin, Ireland, 3 The Royal College of Surgeons in Ireland, University of Medicine and Health Science, School of Medicine, Dublin, Ireland

- Graduate module for 55 HCPs in UCD.
- 250 hours learning, 3 in-person education days, online learning
- Advanced level support.
- Significant increase in knowledge, skills and confidence.



# HSE Competency Framework for Breastfeeding support.

 "Supporting breastfeeding as the biological norm and respecting women's decisions are core principles of competency for every healthcare worker providing support to the breastfeeding mother."

	Level	Description
	Awareness	not engaged full time in care of the breastfeeding mother, have had some orientation in supporting breastfeeding children and their mothers. Basic factual <b>knowledge</b> underpins the care and support offered
	Generalist	actively engaged in providing regular care and support to breastfeeding mothers are involved in direct care of breastfeeding children and their mothers who have routine information and assistance needs and sometimes more <b>challenging</b> needs around BF require a greater degree of knowledge and <b>skills competence</b>
	Specialist	Aimed at health care professionals who provide in depth care and support with breastfeeding challenges, are a resource to other health care workers and develop the capacity of the healthcare team in relation to BF. This includes BF specialists with an IBCLC

https://www.hse.ie/file-library/competence-framework-for-breastfeeding-support.pdf



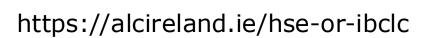


# When should you refer to a Lactation Consultant (IBCLC)?

Parents should be directed to a lactation consultant (IBCLC) for breastfeeding management issues.

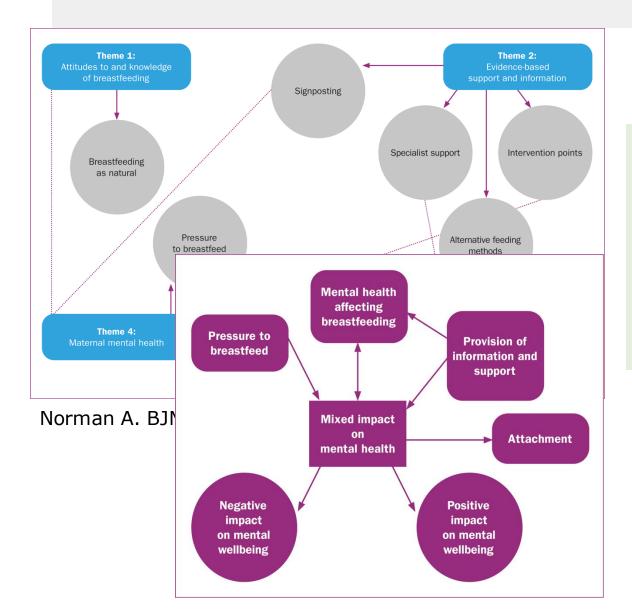
Below are examples of breastfeeding management issues that ALCI advise that a Lactation Consultant is consulted with to support, promote and protect breastfeeding:

- · Latching problems,
- · Supplementation and breastfeeding
- Managing tongue tie
- Medication and Lactation
- Mastitis
- Over supply
- Low milk supply
- Faltering growth /Slow weight gain in the breastfeeding infant
- sore/cracked nipples,
- Exclusive Pumping (EBM),
- Re-lactation,
- Breastfeeding and back to work,
- · Breastfeeding while pregnant,
- Weaning from breastfeeding.





## Breastfeeding influential factors



#### **Physical challenges:**

- Latch (tongue tie)
- Position for feeding
- Supply
- Pumping
- Sore nipples or pain during feeding
- Blocked ducts, Mastitis
- Mother baby separation
- (ref: ALCI)



# Communication in BF support

CASCADEHEALTH.COM

COMMUNICATION STRATEGIES FOR BREASTFEEDING SUPPORT

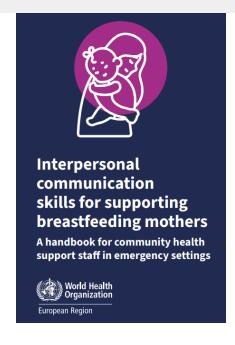


Effective communication between midwives and new mothers is essential for breastfeeding success. By employing specific strategies, midwives can create an environment of trust, understanding, and support.

- Assess the Mother's Priorities
- Active Listening
- Kind and Caring Language
- Positive Reinforcement
- Clear Instruction
- Models and Visual Aids
- Emotional Support
- Personalized Advice

Midwives can create a supportive environment that empowers new mothers by employing effective breastfeeding communication strategies. Your expertise, empathy, and dedication can make a significant difference in their experiences. Every interaction is an opportunity to build trust, provide valuable guidance, and celebrate the unique bond between mather and baby.

Explore the breastfeeding models from Cascade Healtl Care for further resources and tools to enhance your breastfeeding support. Together, let's continue to create meaningful connections and ensure positive breastfeeding experiences for all mothers.



#### WHO Communication principles:

- Counselling skills: listen & learn
- Helpful non-verbal communication
- Ask open questions
- Show interest with responses & gestures
- Reflect Empathise Affirm
- Avoid confrontation, nonjudgmental
- Do not dismiss or debate
- Ask permission to share information



# **Max**SBF

# Maximise support for breastfeeding for sustainable population health and wellbeing: Integrated knowledge translation approach

**Aim**: Identify how breastfeeding can be normalised and support maximised in Ireland applying an Integrated Knowledge translation (IKT) design. Participants include expert researchers, knowledge users (HCPs, AHP, Policy makers), PPI knowledge users (LLL/ALCI), and other not-for-profit organisations (CES and CDI).

- Promotion and population awareness.
- Economic models, Human milk bank sustainability framework.
- Integrate an interprofessional learning model on breastfeeding support for undergraduate healthcare students.
- This integrated programme of research will translate evidence to enhance supports at structural, setting and mother/infant dyad level to maximise breastfeeding.



MaxSBF kicked off 2025 with our first in-person meeting to discuss our Logic Modelling that the individual work packages have been working on. It was a great opportunity to bring our diversity of experience together and to discuss how we can achieve the aims of the project for infant and maternal health in Ireland. Thank you to Centre for Effective Services for their excellent facilitation. This brought our collective experience to the fore and will help us with making further connections to benefit the project. Thank you to all of the team and participants who brought all of

Patricia Leahy-Warren Helen Mulcahy Elaine Lehane Jennifer Hanratty Gillian Weaver MBE Jane Bourke Emma Reilly Aoife Fleming Dr Margaret Murphy Karen Matvienko-Sikar Marian Quinn Claire Ferris Heather Morgan Association of Lactation Consultants in Ireland (ALCI) The Childhood Development Initiative Karl McGrath Caroline Rawdon Aoife Long CIRcUL - Centre for Implementation Research at UL

their energy, enthusiasm and expertise to make the most of the day!







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### Resources for Healthcare professionals

Breastfeeding repository for Healthcare professionals: Association of Lactation Consultants Ireland:

https://alcireland.ie/parent/resources-for-healthcare-professional

https://alcireland.ie/healthcare-provider

#### Health Service Executive:

https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/child-health-and-wellbeing/breastfeeding-healthy-childhood-programme/breastfeeding-websites/#:~:text=The%20La%20Leche%20League%20in,person%20or%20on%20the%20telephone.

#### Cuidiu:

https://www.cuidiu.ie/supports\_breastfeeding\_breastfeedinggroups

La Leche League: <a href="https://www.lalecheleagueireland.com/groups">https://www.lalecheleagueireland.com/groups</a>



