## **Registered Nurses' Association of Ontario:**

Breastfeeding - Promoting and Supporting the Initiation, Exclusivity, and
Continuation of Breastfeeding for Newborns, Infants, and Young Children Best
Practice Guideline
July/2018

# Systematic Review Search Strategy

Literature searches for the systematic reviews were conducted by a health sciences librarian.

<u>Databases Searched</u>: Medline, E-Pub, Cochrane Register for Controlled Trials, Cochrane Database of Systematic Reviews, CINAHL, EMBASE, and ERIC [for research question 3 only].

## **Inclusion Criteria:**

The following criteria were used to guide the literature search:

- A primary focus on sustaining breastfeeding duration and exclusivity
- Published between January 2012 and March 2017
- Published in English
- Accessible for retrieval
- Applicable across health settings/sectors where nurses provide direct clinical care to pregnant and postpartum persons
- Primary focus on Nurses (RN, RPN, NP, CNS)
- Secondary focus on other health-care providers (whose scope of practice overlaps with nursing)
- Peer-reviewed
- For research question 1, study methodology included primary research studies of any study design
- For research questions 2-4, study methodology limited to meta-analyses, systematic reviews, integrative reviews, literature reviews, and reviews of qualitative, quantitative or mixed methods studies
- Studies within the context of developing countries
- Studies quality appraised to be of high or moderate quality, unless more information was required

#### **Exclusion Criteria:**

The following criteria were used to exclude literature from the search:

- Topic not related to sustaining breastfeeding duration and exclusivity
- Dissertations, commentaries, narrative, discussion papers
- Non-English studies
- Unpublished (grey literature)
- Laboratory studies in any type of animal
- Articles conducted within developing countries



- Articles published prior to 2011
- Articles focused primarily on breastfeeding initiation
- Articles related to building or validating assessment/screening tools
- Articles with a specific focus on effectiveness of certain pharmacologic interventions
- Articles with a specific focus on effectiveness of particular clinical diagnostic tests
- Contraception interventions
- Infant populations: Jaundice, tongue tied, preterm/late preterm, twins and multiple births, NICU-admitted infants
- Mother populations: Obese mothers; adolescent mothers; mothers with HIV

### Search Terms

Below are condensed search strategies and search terms used for each research question in MEDLINE. Comparable terms were used in all other databases searched.

**Question 1**: What are effective tools, processes, and strategies used by nurses, the interprofessional team, and peers for assessing pregnant and postpartum families to increase initial, exclusive, and continued breastfeeding?

Breastfeeding	Assessment	Duration	Limits
<ul> <li>Breast feeding</li> <li>Breast milk expression</li> <li>Lactation</li> <li>Milk banks</li> <li>Breastfeed</li> <li>Breast pumping</li> <li>Milk donation</li> <li>Milk donor</li> <li>Milk share</li> <li>Milk transfer</li> <li>Chestfeeding</li> </ul>	<ul> <li>Assess</li> <li>Outcome and process assessment (health care)</li> <li>Nursing assessment</li> <li>Needs assessment</li> <li>Patient outcome assessment</li> <li>Personality assessment</li> <li>Risk assessment</li> <li>Risk factors</li> <li>Mass screening</li> <li>Surveys and questionnaires</li> <li>Data collection</li> <li>Evaluation studies</li> <li>Decision making</li> <li>Perception</li> <li>Cultural characteristics</li> <li>Cultural diversity</li> <li>Cultural competency</li> <li>Social support</li> <li>Ethnic groups</li> <li>Socioeconomic factors</li> <li>Health behavior</li> </ul>	<ul> <li>Sustain</li> <li>Continue</li> <li>Prolong</li> <li>Promote</li> <li>Advocate</li> <li>Debrief</li> <li>Duration</li> <li>Exclusivity</li> <li>Extend</li> <li>Preserve</li> <li>Initiation</li> <li>Follow-up</li> <li>Consult</li> <li>Refer</li> </ul>	<ul> <li>Human studies</li> <li>Not clinical conferences, comments, consensus, editorials, lectures, letters, newspaper articles, or personal narratives</li> <li>2011 – 2017</li> <li>English language</li> </ul>

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<ul> <li>Sucking behavior</li> </ul>	
Maternal health	
services	
Maternal health	
Parental leave	
Patient preference	
<ul> <li>Health knowledge,</li> </ul>	
attitudes, practice	
Self efficacy	
<ul> <li>Aptitude</li> </ul>	
• Screen	
Question or survey	
Data collection	
Decision making	
Barrier	
Latch	
Output	
Experience	
Environment	
Evaluate	

**Question 2**: What are effective interventions or programs used by nurses, the interprofessional team, and peers to increase initial, exclusive, and continued breastfeeding?

Breastfeeding	Intervention	Duration	Limits
<ul> <li>Breast feeding</li> <li>Breast milk expression</li> <li>Lactation</li> <li>Milk banks</li> <li>Breastfeed</li> <li>Breast pumping</li> <li>Milk donation</li> <li>Milk donor</li> <li>Milk share</li> <li>Milk transfer</li> <li>Chestfeeding</li> </ul>	<ul> <li>Patient care</li> <li>Nursing care</li> <li>Patient care team</li> <li>Health services accessibility</li> <li>Nursing services</li> <li>Home care services</li> <li>Women's health services</li> <li>Community health services</li> <li>Urban health services</li> <li>Suburban health services</li> <li>Rural health services</li> <li>Early medical intervention</li> <li>Prenatal education</li> <li>Professional-patient relations</li> <li>Nurse-patient relations</li> </ul>	<ul> <li>Sustain</li> <li>Continue</li> <li>Prolong</li> <li>Promote</li> <li>Advocate</li> <li>Debrief</li> <li>Duration</li> <li>Exclusivity</li> <li>Extend</li> <li>Preserve</li> <li>Initiation</li> <li>Follow-up</li> <li>Consult</li> <li>Refer</li> </ul>	<ul> <li>Human studies</li> <li>Not clinical conferences, comments, consensus, editorials, lectures, letters, newspaper articles, or personal narratives</li> <li>2011 – 2017</li> <li>English language</li> </ul>

	ealth promotion
	ocial support
	eer group
	ommunication
• P	renatal care
• P	ostnatal care
• G	alactogogues
• K	angaroo mother
Ca	are
• P	amphlets
• Se	elf efficacy
• C	ontraception
• Ir	fant formula
• To	elemedicine
• e	Health
• N	lobile applications
• So	ocial media
• B	log
• Ir	ternet
• W	/eb based
• P	rotective devices
• P	rogram evaluation
• G	oals
• C	are
• So	ervice
• Ir	tervention
• P	an
• N	lanage
• C	inical judgment
• B	ehaviour change
• D	iary
• G	oal
• Ir	centive
• P	rogram
• P	roject
	rotective device
• Si	upplement
• T	racking
	aby
	fant
	valuate valuate
	nticipate
• G	uidance

**Question 3**: What education or training is required for nurses, the interprofessional team, and peers to support initial, exclusive, and continued breastfeeding?

	Breastfeeding	Education	Health Worker	Limits
•	Breast feeding	<ul> <li>Education</li> </ul>	<ul> <li>Attitude, health</li> </ul>	<ul> <li>Human studies</li> </ul>



Breast milk	• Continuing	personnel	<ul> <li>Not clinical</li> </ul>
expression	education	<ul> <li>Health personnel</li> </ul>	conferences,
<ul> <li>Lactation</li> </ul>	<ul> <li>Distance education</li> </ul>	<ul> <li>Health occupation</li> </ul>	comments,
<ul> <li>Milk banks</li> </ul>	<ul> <li>Educational model</li> </ul>	<ul> <li>Professional role</li> </ul>	consensus,
<ul> <li>Breastfeed</li> </ul>	<ul> <li>Hospital education</li> </ul>	<ul> <li>Patient care team</li> </ul>	editorials,
<ul> <li>Breast pumping</li> </ul>	department	<ul> <li>Social work</li> </ul>	lectures, letters,
<ul> <li>Milk donation</li> </ul>	<ul> <li>Teaching hospital</li> </ul>	<ul> <li>Consultant</li> </ul>	newspaper
Milk donor	<ul> <li>Clerkship</li> </ul>	<ul> <li>Counseling</li> </ul>	articles, or
Milk share	<ul> <li>Inservice training</li> </ul>	<ul> <li>Research personnel</li> </ul>	personal
<ul> <li>Milk transfer</li> </ul>	<ul> <li>Staff development</li> </ul>	<ul> <li>Leadership</li> </ul>	narratives
<ul> <li>Chestfeeding</li> </ul>	<ul> <li>Preceptorship</li> </ul>	<ul> <li>Volunteer</li> </ul>	<ul> <li>2011 – 2017</li> </ul>
	<ul> <li>Teaching</li> </ul>	<ul> <li>Nurse role</li> </ul>	<ul><li>English</li></ul>
	<ul> <li>Curriculum</li> </ul>	<ul> <li>Nurse</li> </ul>	language
	<ul> <li>Licensure</li> </ul>	<ul> <li>Nursing staff,</li> </ul>	
	<ul> <li>Certification</li> </ul>	hospital	
	<ul> <li>Credentialing</li> </ul>	<ul><li>Nursing</li></ul>	
	<ul> <li>Simulation training</li> </ul>	<ul> <li>Health educator</li> </ul>	
	<ul> <li>Videoconferencing</li> </ul>	<ul> <li>Students</li> </ul>	
	<ul> <li>Learning</li> </ul>	<ul> <li>Consumer advocacy</li> </ul>	
	<ul> <li>Professional</li> </ul>	<ul> <li>Faculty</li> </ul>	
	competence	School teacher	
	<ul> <li>Health knowledge,</li> </ul>	<ul> <li>Health provider</li> </ul>	
	attitudes, practice	<ul> <li>Health staff</li> </ul>	
	<ul> <li>Preceptorship</li> </ul>	<ul> <li>Health employee</li> </ul>	
	<ul> <li>Module</li> </ul>	Health practitioner	
	<ul> <li>Workshop</li> </ul>	<ul> <li>Professional</li> </ul>	
	<ul> <li>Seminar</li> </ul>	<ul> <li>Nursing care</li> </ul>	
	<ul> <li>Orientation</li> </ul>	<ul> <li>Continuity of care</li> </ul>	
	<ul> <li>Coaching</li> </ul>	<ul> <li>Interprofessional</li> </ul>	
	Mentor	Interdisciplinary	
	<ul> <li>Competency</li> </ul>	<ul> <li>Multidisciplinary</li> </ul>	
	Practicum	Lay professional	
		Peer	
		<ul> <li>Nonprofessional</li> </ul>	

Question 4: What are optimal practices, programs, and policies for health-care organizations and the broader community to support initial, exclusive, and continued breastfeeding?

Breastfeeding	Organizational and Community Interventions	Duration	Limits
Breast feeding	Public policy	<ul> <li>Sustain</li> </ul>	Not clinical
Breast milk	<ul> <li>Organizational policy</li> </ul>	<ul> <li>Continue</li> </ul>	conferences,
expression	Health policy	<ul> <li>Prolong</li> </ul>	comments,
<ul> <li>Lactation</li> </ul>	<ul> <li>Legislation</li> </ul>	<ul> <li>Promote</li> </ul>	consensus,
Milk banks	Jurisprudence	<ul> <li>Advocate</li> </ul>	editorials,
<ul> <li>Breastfeed</li> </ul>	Government	<ul> <li>Debrief</li> </ul>	lectures, letters,
Breast pumping	<ul> <li>Regulation</li> </ul>	<ul><li>Duration</li></ul>	newspaper



6	Promoting and Supporting Breastfeeding
Initiation, Exclusivity, and Continuation for Newborns,	Infants and Young Children Best Practice Guideline

<ul> <li>Milk donation</li> <li>Milk donor</li> <li>Milk share</li> <li>Milk transfer</li> <li>Chestfeeding</li> </ul>	<ul> <li>Program</li> <li>Delivery of health care</li> <li>Health planning</li> <li>Organizational innovation</li> <li>Organizational models</li> <li>Decision making</li> <li>Quality improvement</li> <li>Quality management</li> <li>Standard of care</li> <li>Training support</li> <li>Interdisciplinary communication</li> <li>Media</li> <li>Public opinion</li> <li>Leadership</li> <li>Economics</li> <li>Financial support</li> <li>Poverty</li> <li>Community health</li> </ul>	<ul> <li>Exclusivity</li> <li>Extend</li> <li>Preserve</li> <li>Initiation</li> <li>Follow-up</li> <li>Consult</li> <li>Refer</li> </ul>	articles, or personal narratives  • 2011 – 2017  • English language
	services     Prison     Jail     Corrections     Divorce		
	<ul> <li>Child custody</li> <li>Women's rights</li> <li>Human rights</li> <li>Cross sectoral</li> </ul>		
	<ul><li>Institution</li><li>Low income</li><li>Breastfeeding break</li><li>Breastfeeding room</li></ul>		
	<ul> <li>Public space</li> <li>Family room</li> <li>BFHI or BFI</li> <li>Formula company</li> <li>Community service</li> </ul>		

## **Hand Search**

Panel members were asked to review personal libraries to identify key articles not found through the above search strategies. Forty-three articles were submitted. Articles identified by panel members were included in the search results if two nursing research associates independently determined: 1) the articles had not been identified by the literature search; and 2) the articles met the systematic review inclusion criteria.

