

Taulukko 1. Tiedonhaut hyödyntäen PICO-kysymyksenasettelua.

<b>P</b>	Potilasryhmä	Infant or newborn or neonate or preterm or premature or baby Vauva tai vastasyntynyt tai keskonen Intensive care or critical care or NICU or PICU Tehohoito
<b>I</b>	Interventio	Non-pharmacological or non-drug methods or skin-to skin contact/ kangaroo-care or facilitated tucking or swaddling or touching or positioning or holding/rocking or breastfeeding or non-nutritive sucking or music or massage or acupuncture or multisensorial stimulation or glucose or sucrose Lääkkeetön kivunlievitysmenetelmä tai ihokontakti/kenguruhoito tai käsikapalo tai kapalointi tai koskettaminen tai asentohoito tai kiinnipitäminen/keinuttaminen tai imetys tai ei-ravitsemuksellinen imeminen tai musiikki tai hieronta tai akupunktio tai monikanavainen stimulaatio tai sokeri tai sakkaroosi
<b>C</b>	Vertailu	Comparative care Tavanomainen hoito tai plasebo tai lääkehoito tai lääkkeetön kivunlievitysmenetelmä
<b>O</b>	Lopputulosmuuttuja(t)	Pain (procedural) Toimenpiteeseen liittyvä kipu, jonka mittaamisessa on käytetty <ul style="list-style-type: none"> <li>- käyttäytymisessä tapahtuvat muutokset (esim. itku, ilmeet, liikkeet)</li> <li>- fysiologiset muutokset (esim. sydämen syke, verenpaine, hengitys, happisaturaatio)</li> <li>- hormonaaliset muutokset (esim. gluc, kortisoli, katekolamiini)</li> <li>- kipupisteet (esim. PIPP-, NIPS-kipumittarit)</li> </ul>
<b>s</b>	Study design	Systemaattinen katsaus tai meta-analyysi Kokeellinen tutkimus/vaihtovuoroinen tutkimus Systematic review or meta-analysis Randomized controlled trial/cross over design

## Tiedonhaut tietokannoittain (2000–2019–2/2022)

### Scopus

#### Intensive care + RCT:

( TITLE-ABS-KEY ( massage OR acupuncture OR "multisensorial stimulation" OR glucose OR sucrose ) OR TITLE-ABS-KEY ( "non-pharmacological" OR nonpharmacological OR "non-drug" OR nondrug OR "kangaroo-care" OR "skin-to-skin" OR tucking OR swaddling OR touching OR positioning OR holding OR rocking OR "breast feeding" OR breastfeeding OR "non-nutritive sucking" OR music ) AND TITLE-ABS-KEY ( infant OR newborn OR neonate OR preterm OR premature OR baby ) AND TITLE-ABS-KEY ( pain ) AND TITLE-ABS-KEY ( "intensive care" OR nicu OR picu OR "critical care" ) AND TITLE-ABS-KEY ( rct OR "randomized controlled trial" OR "cross-over design" ) ) AND PUBYEAR > 2019

#### Intensive care + systematic review:

( TITLE-ABS-KEY ( massage OR acupuncture OR "multisensorial stimulation" OR glucose OR sucrose ) OR TITLE-ABS-KEY ( "non-pharmacological" OR nonpharmacological OR "non-drug" OR nondrug OR "kangaroo-care" OR "skin-to-skin" OR tucking OR swaddling OR touching OR positioning OR holding OR rocking OR "breast feeding" OR breastfeeding OR "non-nutritive sucking" OR music ) AND TITLE-ABS-KEY ( infant OR newborn OR neonate OR preterm OR premature OR baby ) AND TITLE-ABS-KEY ( pain ) AND TITLE-ABS-KEY ( "intensive care" OR nicu OR picu OR "critical care" ) AND TITLE-ABS-KEY ( "systematic review" OR "meta-analysis" ) ) AND PUBYEAR > 2019

### CINAHL

S37	S29 AND S30	Limiters - Published Date: 20190101-20220207; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S36	S29 AND S31	Limiters - Published Date: 20190101-20220207; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S35	S25 AND S31	Limiters - Published Date: 20190101-20220207; Peer Reviewed Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S34	S29 AND S30	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S33	S29 AND S31	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced

			Search Database - CINAHL
S32	S25 AND S31	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S31	S21 AND S30	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S30	S11 AND S14 AND S17	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S29	S26 OR S27 OR S28	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S28	(MH "Meta Analysis")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S27	(MH "Systematic Review")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S26	"systematic review" OR "meta-analysis"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S25	S22 OR S23 OR S24	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S24	(MH "Crossover Design")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced

			Search Database - CINAHL
S23	(MH "Randomized Controlled Trials+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S22	rect OR "randomized controlled trial" OR "cross-over design"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S21	S18 OR S19 OR S20	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S20	(MH "Pediatric Critical Care Nursing+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S19	(MH "Intensive Care, Neonatal+") OR (MH "Intensive Care Units+") OR (MH "Intensive Care Units, Pediatric+") OR (MH "Critical Care Nursing+") OR (MH "Critical Care+") OR (MH "Intensive Care Units, Neonatal") OR (MH "Neonatal Intensive Care Nursing")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S18	"intensive care" OR nicu OR picu OR "critical care"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S17	S15 OR S16	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL

S16	(MH "Pain+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S15	pain	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S14	S12 OR S13	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S13	(MH "Infant+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S12	infant OR newborn OR neonate OR preterm OR premature OR baby	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S11	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S10	(MH "Music") OR (MH "Music Therapy")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S9	(MH "Breast Feeding+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S8	(MH "Therapeutic Touch") OR (MH "Touch")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL

S7	(MH "Kangaroo Care")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S6	(MH "Sucrose+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S5	(MH "Glucose")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S4	(MH "Sensory Stimulation+") OR (MH "Oral Stimulation")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S3	(MH "Acupuncture+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S2	(MH "Massage+")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL
S1	massage OR acupuncture OR "multisensorial stimulation" OR glucose OR sucrose OR "non- pharmacological" OR nonpharmacological OR "non-drug" OR nondrug OR "kangaroo-care" OR "skin-to-skin" OR tucking OR swaddling OR touching OR positioning OR holding OR rocking OR "breast feeding" OR breastfeeding OR "non-	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL

	nutritive sucking" OR music		
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## **PubMed**

(massage OR acupuncture OR multisensorial stimulation OR glucose OR sucrose OR non-pharmacological OR nonpharmacological OR non-drug OR nondrug OR kangaroo-care OR skin-to-skin OR tucking OR swaddling OR touching OR positioning OR holding OR rocking OR breast feeding OR breastfeeding OR non-nutritive sucking OR music ) ( infant OR newborn OR neonate OR preterm OR premature OR baby ) pain ( intensive care OR nicu OR picu OR critical care ) ( rct OR randomized controlled trial OR cross-over design )

massage	"massage"[MeSH Terms] OR "massage"[All Fields]
acupuncture	"acupuncture"[MeSH Terms] OR "acupuncture"[All Fields] OR "acupuncture therapy"[MeSH Terms] OR ("acupuncture"[All Fields] AND "therapy"[All Fields]) OR "acupuncture therapy"[All Fields]
glucose	"glucose"[MeSH Terms] OR "glucose"[All Fields]
sucrose	"sucrose"[MeSH Terms] OR "sucrose"[All Fields]
positioning	"patient positioning"[MeSH Terms] OR ("patient"[All Fields] AND "positioning"[All Fields]) OR "patient positioning"[All Fields] OR "positioning"[All Fields]
rocking	"stereotypic movement disorder"[MeSH Terms] OR ("stereotypic"[All Fields] AND "movement"[All Fields] AND "disorder"[All Fields]) OR "stereotypic movement disorder"[All Fields] OR "rocking"[All Fields]
breast feeding	"breast feeding"[MeSH Terms] OR ("breast"[All Fields] AND "feeding"[All Fields]) OR "breast feeding"[All Fields]
breastfeeding	"breast feeding"[MeSH Terms] OR ("breast"[All Fields] AND "feeding"[All Fields]) OR "breast feeding"[All Fields] OR "breastfeeding"[All Fields]
music	"music"[MeSH Terms] OR "music"[All Fields]
infant	"infant"[MeSH Terms] OR "infant"[All Fields]
newborn	"infant, newborn"[MeSH Terms] OR ("infant"[All Fields] AND "newborn"[All Fields]) OR "newborn infant"[All Fields] OR "newborn"[All Fields]
neonate	"infant, newborn"[MeSH Terms] OR ("infant"[All Fields] AND "newborn"[All Fields]) OR "newborn infant"[All Fields] OR "neonate"[All Fields]
premature	"premature birth"[MeSH Terms] OR ("premature"[All Fields] AND "birth"[All Fields]) OR "premature birth"[All Fields] OR "premature"[All Fields]
baby	"infant, newborn"[MeSH Terms] OR ("infant"[All Fields] AND "newborn"[All Fields]) OR "newborn infant"[All Fields] OR "baby"[All Fields] OR "infant"[MeSH Terms] OR "infant"[All Fields]
pain	"pain"[MeSH Terms] OR "pain"[All Fields]



intensive care	"critical care"[MeSH Terms] OR ("critical"[All Fields] AND "care"[All Fields]) OR "critical care"[All Fields] OR ("intensive"[All Fields] AND "care"[All Fields]) OR "intensive care"[All Fields]
nicu	"intensive care units, neonatal"[MeSH Terms] OR ("intensive"[All Fields] AND "care"[All Fields] AND "units"[All Fields] AND "neonatal"[All Fields]) OR "neonatal intensive care units"[All Fields] OR "nicu"[All Fields]
critical care	"critical care"[MeSH Terms] OR ("critical"[All Fields] AND "care"[All Fields]) OR "critical care"[All Fields]
randomized controlled trial	"randomized controlled trial"[Publication Type] OR "randomized controlled trials as topic"[MeSH Terms] OR "randomized controlled trial"[All Fields] OR "randomised controlled trial"[All Fields]
cross-over design	"cross-over studies"[MeSH Terms] OR ("cross-over"[All Fields] AND "studies"[All Fields]) OR "cross-over studies"[All Fields] OR ("cross"[All Fields] AND "over"[All Fields] AND "design"[All Fields]) OR "cross over design"[All Fields]
systematic review	"systematic review"[Publication Type] OR "systematic reviews as topic"[MeSH Terms] OR "systematic review"[All Fields]
meta-analysis	"meta-analysis"[Publication Type] OR "meta-analysis as topic"[MeSH Terms] OR "meta-analysis"[All Fields]

#### Intensive care + systematic review:

Search (((((((message[Text Word] OR acupuncture[Text Word] OR multisensorial stimulation[Text Word] OR glucose[Text Word] OR sucrose[Text Word] OR non-pharmacological[Text Word] OR nonpharmacological[Text Word] OR non-drug[Text Word] OR nondrug[Text Word] OR kangaroo-care[Text Word] OR skin-to-skin[Text Word] OR tucking[Text Word] OR swaddling[Text Word] OR touching[Text Word] OR positioning[Text Word] OR holding[Text Word] OR rocking[Text Word] OR breast feeding[Text Word] OR breastfeeding[Text Word] OR non-nutritive sucking[Text Word] OR music[Text Word]))) OR (((((((message[MeSH Terms]) OR acupuncture[MeSH Terms]) OR acupuncture therapy[MeSH Terms]) OR glucose[MeSH Terms]) OR sucrose[MeSH Terms]) OR breast feeding[MeSH Terms] OR music[MeSH Terms]) OR Therapeutic Touch[MeSH Terms] OR touch[MeSH Terms] OR music therapy[MeSH Terms]))) AND (((infant[Text Word] OR newborn[Text Word] OR neonate[Text Word] OR preterm[Text Word] OR premature[Text Word] OR baby[Text Word])) OR infant[MeSH Terms])) AND ((pain[Text Word] OR pain[MeSH Terms])) AND (((intensive care[Text Word] OR nicu[Text Word] OR picu[Text Word] OR critical care[Text Word])) OR (((critical care[MeSH Terms] OR intensive care units[MeSH Terms]) OR Critical Care Nursing[MeSH Terms]))) AND (((systematic review[Publication Type] OR meta-analysis[Publication Type])) OR (systematic review[Text Word] OR meta-analysis[Text Word])) Filters: Publication date from 2019/01/01 to 2022/02/07

#### Intensive care + RCT:

Search (((((((message[Text Word] OR acupuncture[Text Word] OR multisensorial stimulation[Text Word] OR glucose[Text Word] OR sucrose[Text Word] OR non-pharmacological[Text Word] OR nonpharmacological[Text Word] OR non-drug[Text Word] OR nondrug[Text Word] OR kangaroo-care[Text Word] OR skin-to-skin[Text Word] OR tucking[Text Word] OR swaddling[Text Word] OR touching[Text Word] OR positioning[Text Word] OR holding[Text Word] OR rocking[Text Word] OR breast feeding[Text Word] OR breastfeeding[Text Word] OR non-nutritive sucking[Text Word] OR music[Text Word]))) OR (((((((message[MeSH Terms]) OR acupuncture[MeSH Terms]) OR acupuncture therapy[MeSH Terms]) OR glucose[MeSH Terms]) OR sucrose[MeSH Terms]) OR breast feeding[MeSH Terms] OR music[MeSH Terms]) OR Therapeutic Touch[MeSH Terms] OR touch[MeSH Terms] OR music therapy[MeSH Terms]))) AND (((infant[Text Word] OR newborn[Text Word] OR neonate[Text Word] OR preterm[Text Word] OR



premature[Text Word] OR baby[Text Word])) OR infant[MeSH Terms])) AND ((pain[Text Word] OR pain[MeSH Terms])) AND (((intensive care[Text Word] OR nicu[Text Word] OR picu[Text Word] OR critical care[Text Word])) OR (((critical care[MeSH Terms] OR intensive care units[MeSH Terms] OR Critical Care Nursing[MeSH Terms])) AND (((randomized controlled trial[Publication Type] OR cross-over studies[MeSH Terms] OR (cross-over studies[Text Word] OR randomized controlled trial[Text Word])) Filters: Publication date from 2000/01/01 to 2019/12/31

## Cochrane Library

# 1	massage OR acupuncture OR "multisensorial stimulation" OR glucose OR sucrose OR "non-pharmacological" OR nonpharmacological OR "non-drug" OR nondrug OR "kangaroo-care" OR "skin-to-skin" OR tucking OR swaddling OR touching OR positioning OR rocking OR "breast feeding" OR breastfeeding OR "non-nutritive sucking" OR music):ti,ab,kw
# 2	MeSH descriptor: [Massage] explode all trees
	MeSH descriptor: [Acupuncture] explode all trees
#4	MeSH descriptor: [Acupuncture Therapy] explode all trees
#5	MeSH descriptor: [Glucose] explode all trees
#6	MeSH descriptor: [Sucrose] explode all trees
#7	MeSH descriptor: [Breast Feeding] explode all trees
#8	MeSH descriptor: [Music] explode all trees
#9	MeSH descriptor: [Music therapy] explode all trees
#10	MeSH descriptor: [Touch] explode all trees
#11	MeSH descriptor: [Therapeutic Touch] explode all trees
# 12	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11
#13	(infant OR newborn OR neonate OR preterm OR premature OR baby):ti, ab, kw
#14	MeSH descriptor: {Infant} explode all trees
#15	#13 OR #14
#16	(pain):ti, ab, kw
#17	MeSH descriptor: [Pain] explode all trees
#18	#16 OR #17
#19	("intensive care" OR nicu OR picu OR "critical care"): ti, ab, kw
#20	MeSH descriptor: [Critical Care] explode all trees
#21	MeSH descriptor: [Critical Care Nursing] explode all trees
#22	MeSH descriptor: [Intensive care Units] explode all trees
#23	#19 OR #20 OR #21 OR #22
#24	(rct OR "randomized controlled trial" or "cross-over design"):ti, ab, kw
#25	MeSH descriptor: [Cross-Over Studies]explode all trees
#26	(randomized controlled trials):pt
#27	#24 OR #25 OR #26
#28	("systematic review" OR "meta-analysis"):ti, ab, kw
#29	(systematic review):pt
#30	(meta-analysis): pt

#31	#28 OR #29 OR #30
#32	#12 AND #15 AND #18 AND #23 AND #27
#33	#12 AND #15 AND #18 AND #23 AND #31

## **JBI**

1	massage OR acupuncture OR "multisensorial stimulation" OR glucose OR sucrose OR "non-pharmacological" OR nonpharmacological OR "non-drug" OR nondrug OR "kangaroo-care" OR "skin-to-skin" OR tucking OR swaddling OR touching OR positioning OR rocking OR "breast feeding" OR breastfeeding OR "non-nutritive sucking" OR music).mp.[mp=text, heading word, subject area node, tittle]
2	(infant or newborn or neonae or preterm or premature or baby) .mp.[mp=text, heading word, subject area node, tittle]
3	pain.mp.[mp=text, heading word, subject area node, tittle]
4	("intensive care" or nicu or picu or "critical care").mp.[mp=text, heading word, subject area node, tittle]
5	1 and 2 and 3 and 4
6	limit 5 to (systematic reviews and yr="2019-Current")
7	1 and 2 and 3
8	limit 7 to (systematic reviews and yr="2019-Current")