

Literature Review of Instruments for Assessing Babies' Attitudes and Sucking Skills in Breastfeeding

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ABSTRACT

Breast-feed is an important process that can studied and very decisive success breastfeeding, especially during the neonatal period. One of the component crucial in this process is skills baby in to suck as well as attitude or behavior baby moment breastfeeding. This study is review literature that aims For identify, evaluate, and compare various instruments used For evaluate attitudes and skills to suck baby in breastfeeding. Review done to article published scientific papers between 2013 to 2023 from the PubMed and ScienceDirect databases. Eight article selected analyzed based on validity, reliability, and utilities clinical from instruments used, such as the Neonatal Oral-Motor Assessment Scale (NOMAS), Bristol Breastfeeding Assessment Tool (BBAT), LATCH, Infant Breastfeeding Assessment Tool (IBFAT), and others. The results of the review show that instruments the own mark practical in detect readiness breastfeeding, pattern suction, and attitude baby moment breastfeeding, so it is very beneficial in support maintenance mother and baby in a way effective. With use the right instrument, power health can give intervention early and improve success breastfeeding, especially for babies premature.

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INTRODUCTION

Breast milk is source easy nutrition digested by the baby, pregnant fluids and nutrients needed for growth and development baby (Ho, 2021). WHO and UNICEF recommend that babies start breastfeeding in the first hour after born and exclusively breastfed for 6 months First his life – meaning No There is food or other fluids given, including water (World Health Organization, 2020). Indonesia's exclusive breastfeeding coverage in 2022 was recorded only 67.96%, down from 69.7% from 2021, indicating the need support more intensive so that coverage This Can increase (Ministry of Health of the Republic of Indonesia, 2023). Several research that includes in review This consider in a way details of related assessment instruments with skills to suck baby in breastfeeding.

Breastfeeding is a process that can be learned. It is very important to know and apply the correct breastfeeding techniques so that the baby gets the optimal benefits from breast milk. The position of the mother during breastfeeding, how to hold the baby, how the baby attaches to the breast, the sound of swallowing, the tip of the breast (too big and sinking) skill level baby to suck in breastfeeding is an indicator that guides breastfeeding evaluation and helps identify problems. (Ingram et al., 2015). Review skills breast-feed baby is A component important from maintenance mother and baby in the early neonatal period. For do matter this,

midwives and nurses depend on knowledge theoretical they, clinical skills and experience For evaluate breastfeeding (Ho, 2021),

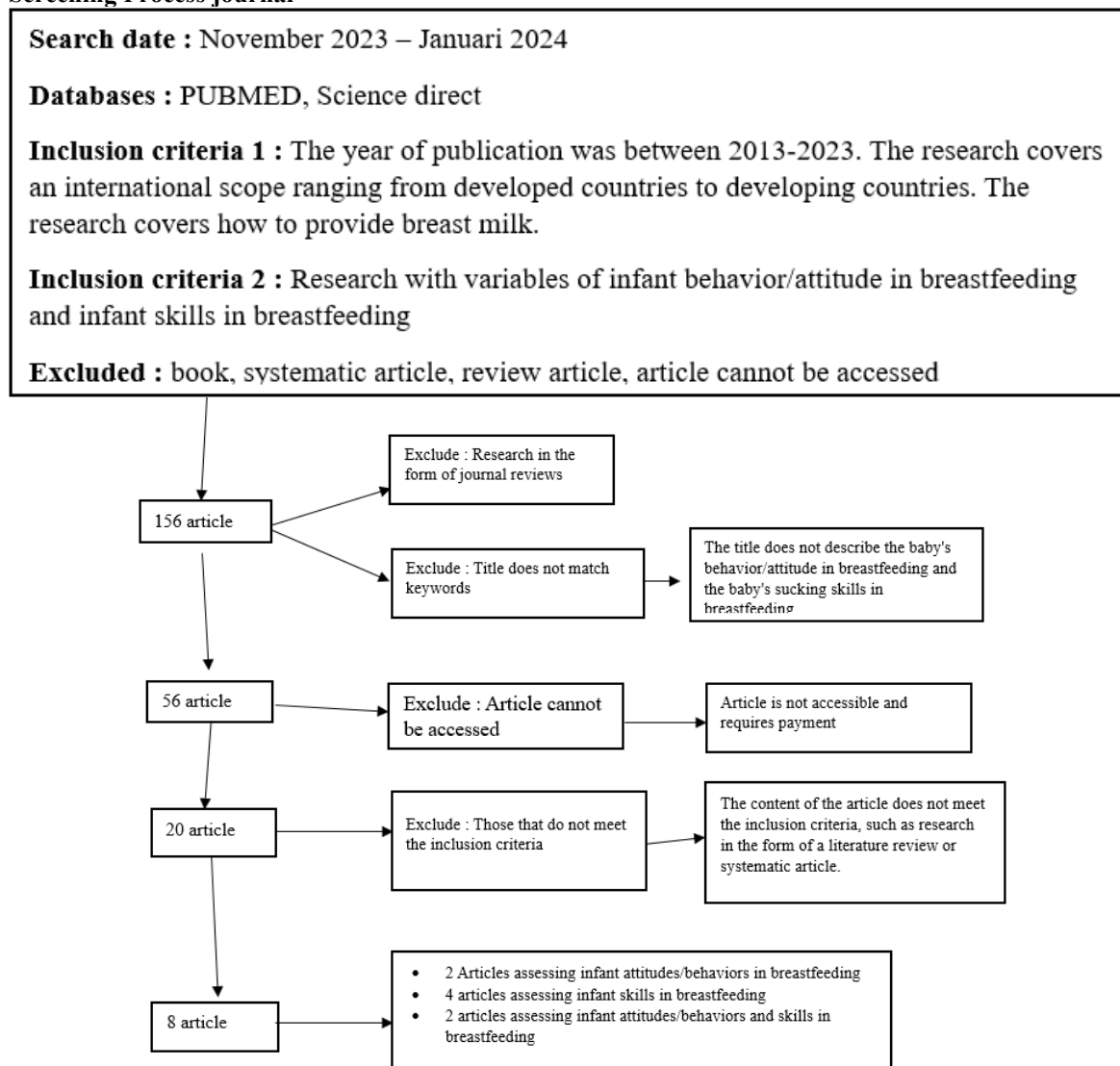
This study aiming For advance policies and practices based on proof in promotion and support breast-feed with identify and evaluate assessment instruments attitudes and skills to suck baby in breastfeeding including size that can be used For predict initiation and/ or duration breastfeeding. This is aiming For review, compare and contrast report reliability, validity and utility clinical from action This.

METHOD

For needs review this, abstract For all articles that measure variables attitudes, and related with skills baby to suck in breastfeeding, reviewed with A study independent. Only publications that report matter the or testing more carry on on action those reviewed in a way complete. Literature refers to tools, instruments, measures and evidence. In the review This the term “ size ” will used in a way overall. The term ' evidence ' refers to support For the stated conclusion based on reported findings in reviewed studies.

Data used sourced from article scientific from journal database namely Google scholar and PubMed. Search using the keywords " Exclusive Breastfeeding ", "Instrument breastfeeding", "Baby's Sucking Skill". Criteria inclusion namely (1) Year rise between 2013-2023, (2) Research covers scope international start from developed countries and also developing countries, (3) includes method breastfeeding, (4) includes attitude and skill variables to suck baby breastfeeding. Criteria exclusion that is Books, published reports, literature reviews. After do selection in a way strict only 56 articles match Then selected Again based on method with results only 8 articles.

Screening Process journal



Results table study

NO	NAME AND YEAR	COUNTRY	TITLE	RESEARCH PURPOSES	RESEARCH VARIABLES AND ANALYSIS TOOLS	RESULTS
1	Saakje P. da Costa, Nicole Hubl, Nicole Kaufman, Arend F. Bos (2016)	United Kingdom	New scoring system improves inter-rater reliability of the Neonatal Oral-Motor Assessment Scale	For evaluate pattern sucking in babies until 48 weeks old.	Study This use tool analysis in the form of NOMAS instrument	Research result mention that there is arrhythmic and incoordinated tongue and jaw movements in infants new birth involved in study This
2	Crowe L, Chang A, Wallace K (2016)	Australia	Instruments for assessing readiness to commence suck feeds in preterm infants: effects on time to establish full oral feeding and duration of hospitalization	Research purposes This is For For evaluate readiness baby For breastfeeding in a way exclusive or use bottle	With using The Preterm Infant Nipple Feeding Readiness Scale (PINFRS)	Result of study This convey that utility clinical from implementation use instrument is For evaluate readiness giving Eat population baby premature.
3	Geovana de paula Bolzan, Luana Cristy, Leila Sauer prade, lilian head leave, Raquel coube de carvalho Yamamot, Ana Maria Toniolo da Silva, Angela Regina Maciel Weinmann (2024)	Brazil	Assessment for oral and breastfeeding in preterm infant	Research purposes This is For evaluate accuracy of the Preterm BreastFeeding Readiness Scale at baseline breastfeeding or giving oral food in infants premature and for verify i conformity tool This.	82 babies premature assessed by the instrument about readiness they For start breastfeeding and giving oral food	Result of study This serve aspects important from behavior and skills baby to suck as well as giving Eat premature which is together will guide required behavior with more Good For give effective and fast transition
4	Cori Zarem, HiroyukiKid okoro, Jeffrey Neil, Michael Wallendorf, Terriender Roberta Pineda (2013)	USA	Psychometrics of the Neonatal Oral Motor Assessment Scale	Research purposes This is For set NOMAS related psychometrics skills mouth baby in to suck	In the study cohort prospective against 75 infants (39 girls, 36 boys) .NOMAS used For classify giving Eat like normal, no regular, or No works.	Research result This show that although NOMAS score is not associated with Lots type injury grilled fish cake small can own connection important with performance to suck moment breastfeeding

5	Jenny Ingram, Debbie Johnson, Marion Copeland, Cathy Churchill, Hazel Taylor, (2015)	UK	The development of a new breast feeding assessment tool and the relationship with breast feeding self-efficacy	For develop tool possible assessment used in a way effective and consistent by midwives, consultants lactation, counselor breastfeeding and other parties to evaluate attitudes and skills baby in breastfeeding	In developing BBAT, five midwives / experts breast-feed discuss elements from tool evaluation breastfeeding that exists and decides For use a number of the elements that similar with two LATCH items (swallowing, comfort) and one from IBFAT (sucking) and added two new items For rated positioning and engagement based on proof study	results study This say evaluation breastfeeding observed by midwife with use tool said, and researchers conclude that both instruments accurate For do evaluation attitudes and skills baby in breastfeeding
6	Deborah L. Tobin (2015)	USA	A Breastfeeding Evaluation and Education Tool	Research purposes This is For explain focusing tool parents ' attention to related elements with Initiation breast-feed early as well as attitude baby in breastfeeding	following tools, which can given as sheet For brought home, in the form of sheet evaluation and education	Result of study This state that tool evaluation and education This increase parental knowledge about attitude baby in breastfeeding
7	Ariel A. Salasa, Claire Meadsb, Shae Ganusb, Anisha Bhatiaa, Caitlin Taylora, Paula Chandler-Laneyc, Masudul H. Imtiazd, Edward Sazonov (2020)	USA	Quantitative assessment of nutritional sucking patterns in preterm infant	Research purposes This is For For evaluate pattern suction nutrition in very premature babies with age pregnancy ≤ 32 weeks..	Suction pattern nutrition determined use algorithm general applied to both suction strength and density data suction.	Research result This show that Maximum sucking force correlates with the number of suctions
8	Eva-Lotta Funkquist,	Swedish	Developing the Preterm	The purpose of study This is For	A total of 70 nurses specialist	Research result has show that

Andreas Rosenblad (2021)	Breastfeeding Attitudes Instrument: A tool for describing infant's attitudes towards breastfeeding among health care professionals in neonatal intensive care	develop an instrument that measures attitude to breastfeeding and skills baby moment to suck as well as contact skin in the relation with Baby Friendly Hospital Initiative for neonatal maintenance intensive.	registered, nurse registered, assistant nurses and doctors working in a nursing unit Swedish neonatal intensive care answer 55 questions about Baby's Attitude and Skills breastfeeding	breastfeeding is very important for baby premature and and power health need improve and develop tool useful measure For support breastfeeding
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RESULTS AND DISCUSSION

1. Instrument Neonatal Oral-Motor Assessment Scale

Instrument Neonatal Oral-Motor Assessment Scale or normal known with the NOMAS instrument is tool assessment with method to observe visually used For evaluate skills sucking in infants developed by Marjorie Meyer Palmer in 1985. It is explained in article New scoring system improves interrater reliability of the Neonatal Oral-Motor Assessment Scale evaluation can done in a way direct and also observe via video. The NOMAS sub- scores consist of from 12 ratings dichotomous organization suction nutrition (rhythm suction) and 8 ratings function suction nutrition (movement seal lips, tongue and jaw). The maximum total score is 48, the higher the score indicates better oromotor ability. Evaluation to attitude with NOMAS instruments covering baby with normal condition and baby with movement tongue and jaw that are not regular or No function, assessment This done since baby born until 8 weeks old.

2. Bristol Breastfeeding Assessment Tool

The Bristol Breastfeeding Assessment Tool is tool evaluation breastfeeding device developed by Jenny Ingram in 2015. This tool used For measure difficulty breast-feed postpartum, and can also evaluate in a way effective in identify babies who experience difficulty tongue based on skills baby the in breastfeeding. Explained in article by jenny ingram tools evaluation This known short, simple and easy used as well as has 4 assessment items namely positioning, attachment, sucking and swallowing with scale assessment 0= bad, 1= moderate, 2= good.

3. LATCH Breastfeeding Assessment

The LATCH Breastfeeding Assessment is a breastfeeding instrument consisting of on 5 indicators, namely adhesion, sound swallow, type or nipple shape, comfort and position baby. In the article LATCH: A Breastfeeding Charting System and Documentation Tool written by Deborah Jensen it is explained that LATCH is effective used as tool measuring breastfeeding and also can be a predictor of success breastfeeding which has an impact on exclusive breastfeeding endure longer. LATCH provides score numeric (0, 1, or 2) up to five components main breast milk is marked with the letters in the acronym LATCH: "L" indicate how much Good baby attached breast, "A" is For amount voice swallow noted, "T" for type / condition nipple mother, "C" is For Comfort level mother, and "H" for the amount help needed Mother For carry the baby to breasts. The total score ranges from from 0 to 10, with higher score tall serve success breastfeeding. Low LATCH score If value 0-3, value the score is in progress If value 2 – 4 and value score tall If mark score 8-10.

4. Infant Breastfeeding Assessment Tool

The Infant Breastfeeding Assessment Tool was created in 1988 and is described by the article The development of a new breast feeding assessment tool and the relationship with breast feeding self-efficacy by Jenny Ingram IBFAT is tool For assess and measure evaluate condition baby, readiness, rooting, attachment, behavior sucking, and satisfaction Mother to experience breastfeeding. Each component the have significant role to behavior breast-feed baby covering, readiness For give eating, rooting, fixation and suction. Each component given mark numeric 0, 1, 2, 3 based on selected answers and scores the total is 12 which is score giving Eat strong and effective. Items 1–5 consist of from evaluation giving Eat baby and given score on four

scale choice response with total score 10–12 indicates giving effective and full meal spirit, 7–9 indicates giving eat enough effective, and 0–6 indicates baby given Eat with ok. no capable woke up or No rooted and powerful suck it weak moment breast-feed.

5. Breastfeeding Evaluation and Education Tool

Breastfeeding Evaluation and Education Tool is tools that focus on parental attention of 8 related elements with early breastfeeding. In an article by Deborah Tobin with The title A Breastfeeding Evaluation and Education Tool is explained that eight element the covering feeding, positioning, attachment, sucking, milk flow, intake, output, and weight gain of the baby.

6. The Preterm Infant Nipple Feeding Readiness Scale

The Preterm Infant Nipple Feeding Readiness Scale is an assessment instrument for the readiness of premature babies to breastfeed. However, this instrument is not only intended to assess readiness to breastfeed, but breastfeeding skills are also assessed with this instrument. In the article Psychometrics of the Neonatal Oral Motor Assessment Scale it is explained that Consisting of of 13 grouped items into 3 factors that evaluate various aspect related giving food : “ Capacity For to coordinate sucking-swallowing-breathing ” (six items: 3, 4, 5, 6, 7 and 11), “ Capacity For manage backup oxygen ” (four items: 8, 9, 12 and 13) and “ Capacity For take a pacifier or nipples ” (three items: 1, 2 and 10). The first ten items evaluated during giving oral food, with three remaining items rated three tens minute after giving food finished. There are four response Likert style for each item, with mark range from 1 to 4, with higher score tall reflect more readiness big For giving oral food. Scores for items 4, 8, 9 and 12 should be reversed (1 = 4, 2 = 3, 3 = 2, 4 = 1) before count score total. The total score is summation score all items, with minimum score 13 and maximum 52.

7. Quantitative Assessment Of Nutritive Sucking Patterns In Preterm Infants

Quantitative Assessment Of Nutritive Sucking Patterns In Preterm Infants is an instrument to assess sucking patterns in premature infants. In the article Quantitative assessment of nutritive sucking patterns in preterm infants it is explained that this instrument assesses nutritional sucking patterns quantitatively, health workers can identify premature infants with abnormal patterns early on and objectively assess the response to oral intervention. This type of quantitative assessment can encourage the achievement of independent oral feeding, reduce the length of hospital stay, and thus reduce health care costs in premature infants who are at high risk for long-term hospitalization.

8. Preterm Breastfeeding Attitudes Instrument

Based on the article Developing the Preterm Breastfeeding Attitudes Instrument: A tool for describing infant's attitudes to breastfeeding among health care professionals in neonatal intensive care, it is explained that the Preterm Breastfeeding Attitudes Instrument consists of twelve of the 55 items/questions, selected using exploratory factor analysis. The questions are based on the BFHI (Baby-Friendly Hospital Initiative) Ten Steps to Successful Breastfeeding and the three guiding principles of Neo-BFHI. All items are anchored on a 4-point Likert scale where 1 = “not true at all”, 2 = “not true”, 3 = “fairly true”, and 4 = “appropriate”. For some questions, the answers are reverse scored so that 1 = “appropriate true” and 4 = “not true at all”. Scores are summed to produce a total score, with higher scores indicating more positive attitudes toward breastfeeding.

CONCLUSION

Breastfeeding is a process that can be learned. It is very important to know and apply the correct breastfeeding techniques so that the baby gets the optimal benefits from breast milk. Instruments in the article This is a reliable and valid instrument for evaluate attitudes and skills baby to suck in breastfeeding. This instrument consists of on Instruments Neonatal Oral-Motor Assessment Scale, Bristol Breastfeeding Assessment Tool, LATCH Breastfeeding Assessment, Infant Breastfeeding Assessment Tool, Breastfeeding Evaluation and Education Tool, The Preterm Infant Nipple Feeding Readiness Scale, Quantitative Assessment Of Nutritive Sucking Patterns In Preterm Infants, Preterm Breastfeeding Attitudes Instrument.

Suggestion

It is expected that the assessment instrument This can always used in maintenance mother and baby during the period early neonatal for know ability baby in breastfeeding to meet needs nutrition baby can fulfilled optimally.

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