

Analysis of Early Breastfeeding Initiation for Newborns in Palu City

Ayu Lestari^{1*}, Shindi Karmila Adam², Jamaludin M Sakung³

¹Faculty of Public Health, Universitas Muhammadiyah Palu, Central Sulawesi, Indonesia, ayulestari.gkm@gmail.com

²Faculty of Public Health, Universitas Muhammadiyah Palu, Central Sulawesi, Indonesia, shindikarmila392@gmail.com

³Faculty of Public Health, Tadulako University, Central Sulawesi, Indonesia, jamal_utd@yahoo.com

*Corresponding Author: E-mail: ayulestari.gkm@gmail.com

ARTICLE INFO

Manuscript Received: 20 Jun, 2025

Revised: 10 Jul, 2025

Accepted: 10 Jul, 2025

Date of publication: 15 Jul, 2025

Volume: 5

Issue: 1

DOI: [10.56338/promotif.v15i1.7853](https://doi.org/10.56338/promotif.v15i1.7853)

KEYWORDS

Early Breastfeeding Initiation;
Maternal Knowledge;
Maternal and Infant Health
Conditions;
Health Professional Support;
Family Support

ABSTRACT

Introduction: Early breastfeeding initiation is a critical intervention to reduce neonatal mortality and increase exclusive breastfeeding success. However, its implementation in RSIA Tinatapura Palu is still not optimal. This study aimed to assess the provision of early initiation of breastfeeding in newborns and identify the factors that inhibit it at Tinatapura Mother and Child Hospital, Palu.

Methods: This study uses a qualitative method with a descriptive approach, which aims to conduct in-depth interviews through data collection from various sources of information.

Results: This study found that implementation of early breastfeeding initiation at RSIA Tinatapura Palu was not optimal, with the majority of mothers reporting no IMD postpartum. Key barriers included low maternal knowledge about IMD, postpartum maternal and infant health conditions, inconsistent hospital policies such as mother-infant separation after delivery (especially for sectio caesarean/premature cases) and flexibility in formula feeding without medical indication, and inadequate support from health workers, including lack of education and a tendency to recommend formula. While hospitals claim to provide training and education, there is a gap between policy and practice on the ground.

Conclusion: The implementation of early breastfeeding initiation in RSIA Tinatapura Palu is still not running optimally. Structured interventions are needed in the form of clear IMD protocols, increased education for mothers and families, and ongoing training for health workers to ensure consistent and standardized IMD implementation.

Publisher: Fakultas Kesehatan Masyarakat Universitas Muhammadiyah Palu

INTRODUCTION

Breastfeeding is one of the most effective measures to ensure child health and survival (1). As a practical measure to protect the survival and health of infants and women, breastfeeding is a central part of the 2030 Agenda for Sustainable Development (2). Early initiation of breastfeeding is the utilization of the golden time in the first hour of life. It is also one of the ways to achieve the WHO Global Target of 2025 to increase exclusive breastfeeding in the first six months to 50%, reduce low birth weight by 30%, reduce stunting by 40%, and reduce wasting in children below 5% (3).

Despite the benefits of breastfeeding, many countries still do not achieve optimal early initiation of breastfeeding within the first hour of life. Globally, three in five infants are not breastfed during the first hour of life.

This problem is found in high, middle and low-income countries (4). Globally, UNICEF and WHO recommend that mothers start breastfeeding within the first hour after delivery and exclusively breastfeed infants for the first six months of life. Early initiation of breastfeeding in newborns within the first hour of life is critical for newborn survival and establishing long-term breastfeeding (5).

Data from the Ministry of Health of the Republic of Indonesia shows fluctuating developments in the percentage of Early Breastfeeding Initiation (IMD) in newborns nationally. IMD coverage reached 46.9% in 2021 (6), then increased to 58.1% in 2022 (7), but again decreased to 45.6% in 2023 (8). Based on data from the Health Profile of Central Sulawesi Province, a similar trend was seen with the achievement of 89.7% in 2021 (9), then increased to 91.9% in 2022 (10), and decreased again to 89.5% in 2023. Based on this data, Central Sulawesi Province in 2023 has successfully exceeded the national target of 66%. However, when compared to the exclusive breastfeeding rate in 2023, which only reached 54%, Central Sulawesi Province is still far below the National Medium-Term Development Plan (RPJMN) target of 75% (11). This phenomenon reveals that the achievement of early breastfeeding initiation does not automatically impact on the sustainability of exclusive breastfeeding. This illustrates that there are challenges in implementing early breastfeeding initiation as an effective intervention to increase the success of exclusive breastfeeding in health care facilities, including hospitals.

Tinatapura Hospital is one of the referral hospitals in Central Sulawesi that has a strategic role in supporting the practice of early breastfeeding initiation. However, preliminary studies show that RSIA Tinatapura has not fully implemented early breastfeeding initiation optimally. Internal hospital data in October 2023 showed that out of 143 mothers who gave birth, only 102 infants performed early breastfeeding initiation, while 41 infants did not perform early breastfeeding initiation (12). This phenomenon indicates that there are barriers in the implementation of early breastfeeding initiation, such as lack of maternal knowledge, support from health workers, and evaluation of hospital policies. A previous study by Dwi Riyanti (2023) at the Haji Surabaya General Hospital also found that only 25 out of 30 infants successfully received IMD (13), indicating that this problem is not only occurring in Palu City, Central Sulawesi Province, but also in other regions in Indonesia.

Breastfeeding within the first hour helps provide colostrum to the newborn. It also helps prevent newborn infections such as pneumonia and diarrhea, thus reducing the risk of newborn mortality. Early initiation can also support continued breastfeeding with long-term benefits for the mother, such as postpartum weight management, and reducing the risk of non-communicable diseases such as type 2 diabetes, cancer, stroke, and cardiovascular disease. The long-term benefits for infants include weight maintenance and prevention of obesity in childhood, adolescence and adulthood (14).

Factors such as maternal knowledge, family support (especially husbands), and the role of health workers greatly influence the success of early breastfeeding initiation (15). Another factor that hinders early breastfeeding initiation is the introduction of prelacteal foods or drinks in the first days of birth because breast milk is usually not yet expressed. This is a vulnerable period for infants to be given prelacteal foods or drinks, such as formula milk, by mothers or midwives as found during the initial observation. A strong commitment from the mother or midwife to provide exclusive breastfeeding will be very helpful so that the baby is not given prelacteal food or drinks (16).

This study was conducted to identify the provision of early initiation of breastfeeding in newborns to reveal the underlying causes so that there are still mothers who are not given early breastfeeding, then the dependence on formula milk which also hampers the implementation of early initiation of breastfeeding in hospitals. This gap shows the need for more in-depth research on the implementation of early breastfeeding. This study aimed to assess the provision of early breastfeeding to newborns and identify barriers at Tinatapura Mother and Child Hospital, Palu, to provide a basis for proposing contextually relevant interventions that not only contribute to increasing IMD coverage, but also support the achievement of exclusive breastfeeding targets in Central Sulawesi.

METHOD

This study used a qualitative method with a descriptive approach, which aims to conduct in-depth interviews through data collection from various sources of information. The research was conducted at Tinatapura Mother and Child Hospital, Palu City, Central Sulawesi. The research subjects included the main informants, namely ten postpartum mothers who were hospitalized at RSIA Tinatapura Palu, key informants, namely the Representative of the Head of the Hospital, as well as additional informants consisting of and one head of the inpatient room, one midwife and one nurse at RSIA Tinatapura Palu.

Data collection methods in this study included in-depth interview techniques and observation. The interview guide was developed by adapting previous research instruments and customized specifically for the context of RSIA Tinatapura Palu. The interview instrument contained a number of questions related to the provision of postpartum

early breastfeeding and the factors that influence the implementation of IMD practices. This study also utilized various equipment such as office stationery, voice recorder, and camera to document the interview process. Data validity was tested through the process of validating information from informants by applying triangulation techniques, especially source triangulation which was done by comparing data from various informants.

RESULTS

Based on thematic analysis, this study identified two main themes from the interviews:

1. Early Breastfeeding Initiation

Based on the interviews with the main informants, it can be concluded that most mothers do not initiate early breastfeeding after delivery. Although some informants reported experiencing early breastfeeding initiation in their first birth at another hospital, this practice was not consistently practiced in subsequent births or at the health facility of their choice for delivery. In addition, some mothers directly fed formula without going through the early breastfeeding initiation process, while others only started breastfeeding after receiving guidance from health workers. This is in line with the informants' statements as follows:

"...There is no IMD deck... and it's not from my desire not to have IMD, because maybe it's from the hospital so they (they, the hospital and health workers) don't give IMD to us after giving birth... but I don't know if other patients deck... whether the midwife gives IMD or not. But after I gave birth, my child was immediately taken to the baby care room, my child was there for more than 2 hours ... then he was taken to me" (Interview on April 2, 2024, with RAD).

"...I didn't have IMD, I just gave formula milk..." (Interview on April 2, 2024, with MDN)

"...There was no IMD for me.... After I gave birth my child was immediately taken to the baby care room ..." (Interview on April 2, 2024, with DA)

"...There was no IMD the midwife gave it to me deck..." (Interview on April 2, 2024, with NA)

"...I did not do IMD for this second child de... just from the midwife, so (already) take my child in baby care, she said she wanted to give a bath, after that (after that) there was no more IMD...". If the first child was my sister's wish, then I followed. After the IMD, my milk came out quickly, but this one didn't... so my child was given formula milk..." (Interview on May 4, 2024, with AS)

"...I didn't have any last night. My first child was born at Untada Hospital but there was an anukan (placed) on the chest, but this second child is no longer like that. Only (then) with my first child, I was accompanied by my husband and the midwife.." (Interview on May 4, 2024, with GB)

"...I gave birth to my third child here (RSIA Tinatapura Palu)... So there is no IMD, only my first child was done, and even then I was born at Untada Hospital, and yesterday I was accompanied by the midwife alone and my husband was not..." (Interview on May 4, 2024, with CTA).

"My third child was not initiated early breastfeeding. When I was born, I wondered why I wasn't given Early Breastfeeding Initiation. When I gave birth at the health center, the midwife wanted it and I also wanted it because every time I went to the health center to check I was often told about Early Breastfeeding Initiation. But there was no IMD here" (Interview on May 4, 2024, with YN).

"...There was no IMD for me..." (Interview on May 4, 2024, with KR)

"I didn't have a midwife last night, just after the birth my baby came out, immediately dorang (they in this case health workers both midwives and nurses) took it to the baby room" (Interview on May 4, 2024, with AML)

Judging from the results of interviews with additional informants, namely the head of the inpatient room, midwives, and nurses (ANT, NL, and NMA), stated that IMD is highly recommended in the first 60 minutes after delivery to stimulate breast milk production, although there are often obstacles, especially in new mothers who are inexperienced. If the milk has not been released, mothers are still advised to start the breastfeeding process to stimulate natural milk production. However, informants are also flexible by allowing formula feeding if breast milk is not produced, in consideration of preventing risks such as fever or jaundice in infants, while encouraging mothers to keep trying to breastfeed. If a patient refuses IMD, health workers provide education about the benefits of IMD and encourage breastfeeding practices gradually. This is in line with the informants' statements as follows:

"... So far, dorang (postpartum mothers) want to breastfeed their babies, but there are usually obstacles, especially first mothers, meaning new mothers, aka the first time they have a child. There must be obstacles, we encourage the mother to do IMD, we still encourage the mother. if for example you want to give breast milk and it hasn't come out, you still stimulate the baby to suckle even though it hasn't come out later if you stimulate the baby, it will come out. But usually there are mothers who want to give formula milk, usually we advise them to keep breastfeeding it will come out by itself but if for example it hasn't come out, you can give formula milk because if the baby doesn't drink, he can get a fever and the baby can get yellow so yes, if it hasn't come out, we usually allow the mother but still breastfeed the baby" (Interview on April 2, 2024, with ANT).

"...if the mother is usually immediately willing, she never refuses. If it is a caeser, IMD is not given immediately because the mother is usually not aware..." (Interview on April 2, 2024, with NL)

"...No one actually refuses IMD, if to provide hmm what's the name eee... information to patients, the babies are delivered by nurses in the perina room (in the baby room), so the baby room always educates patients. So if it's to educate, yes we educate too but ... educating the mother for the first time to breastfeed must be from the perina room in the baby room so..." (Interview on April 2, 2024, with NMA)

Information obtained based on the results of interviews with key informants (Hospital representatives), stated that the RSIA Tinatapura Palu implemented early breastfeeding initiation starting from motivating all service staff in improving skills in the practice of early breastfeeding initiation through instructing activities. This is in line with the informant's statement as follows:

"Conducting training within the hospital environment can also be done through our more experienced medical staff, who can share, convey, and teach their colleagues... What is it called in the hospital environment? Well, if we conduct training outside the hospital, the purpose of that external training is to acquire knowledge from outside sources, bring that knowledge here, and adapt it to the hospital's conditions. That is the objective. The purpose of participating in that training is to acquire knowledge from outside sources and apply it here..." (Interview on April 2, 2024, with HP.)

2. Internal and external factors inhibiting early initiation of breastfeeding

Maternal Knowledge of Early Breastfeeding Initiation

Based on interviews with key informants, it was found that most informants (RAD, MDN, DA, NA, AS, GB, KR, and AML) had no knowledge of early breastfeeding initiation (IMD), and some of them who had given birth more than once stated that they had never received this information from health workers. Only two informants (CTA and YN) were able to explain the concept of IMD with basic understanding, such as putting the newborn on the mother's chest to seek breast milk independently or providing breast milk as soon as possible after delivery. They knew this through their experience of giving birth in certain health facilities. This is in line with the informants' statements as follows:

"...I don't know..." (Interview on April 2, 2024, with RAD)

"...About what it is deck... I don't know..." (Interview on April 2, 2024, with MDN)

"I don't know" (Interview on April 2, 2024, with DA)

"I don't know dek... I have given birth (labor) here twice, but so far I was not told about the IMD that you asked about" (Interview on April 2, 2024, with NA)

"...I don't know de..." (Interview on May 4, 2024, with AS)

"...Don't know de..." (Interview on May 4, 2024, with GB)

"...Early Breastfeeding Initiation is eee...What is the name for a newborn baby is given (given) colostrum by (by) the mother, the firstborn baby is placed on the chest and then the baby seeks (seeks) his own breast milk" (Interview on May 4, 2024, with CTA)

"...Early Breastfeeding Initiation is giving breast milk to the newborn as soon as possible... I heard that from the midwife when I gave birth. I gave birth yesterday to my first and second child at Puskesmas Balesang and Puskesmas Tonggolobibi in Sojol Village" (Interview on May 4, 2024, with YN)

"...No dee... I know.." (Interview on May 4, 2024, with KR)

"I don't know about IMD" (Interview on May 4, 2024, with AML).

The results of other interviews conducted with key informants also found that most informants (RAD, MDN, DA, NA, GB, CTA, KR, and AML) did not know the benefits of initiating early breastfeeding in newborns. This is in line with the informants' statements as follows:

"...I do not know about the benefits of IMD and I have never done IMD..." (Interview on April 2, 2024, with RAD)

"...Where do I know deck, not at all..." (Interview on April 2, 2024, with MDN)

"...No deck..." (Interview on April 2, 2024, with DA)

"...I don't know about that..." (Interview on April 2, 2024, with NA)

"...For my first child, I was given (told) the benefits deck... he said that he was deliberately given (done) taru (placed) on the chest to get to know his mother's body so that the milk comes out quickly, fast recovery after giving birth, anyway a lot was given (told)... just (it's just) I so (I've) forgotten deck..." (Interview on April 4, 2024, with AS)

"...I don't know deck..." (Interview on April 4, 2024, with GB)

"...I don't know deck..." (Interview on April 4, 2024, with CTA)

"...Benefits eee.... Speeding up the healing of the mother who gave birth and preventing infection to the baby..." (Interview on April 4, 2024, with YN)

"...I don't know..." (Interview on April 4, 2024, with KR)

"...Don't know..." (Interview on April 4, 2024, with AML)

However, in relation to perceptions of exclusive breastfeeding and formula milk, based on the interview results, it was also found that all informants had a positive perception of breastfeeding compared to formula milk, with the main reasons being that breastfeeding is more practical, cost-effective and healthier for the baby. They realized that breastfeeding does not require complicated preparations like formula milk, which requires additional equipment and regular expenses, while recognizing its economic benefits in saving family expenses. Nonetheless, some informants were previously forced to give formula milk due to the constraint of breastmilk not being released postpartum, indicating a gap between awareness of the advantages of breastmilk and actual practice in the field. This is in line with the informants' statements as follows: This finding indicates the need for more intensive support from health workers to facilitate successful early breastfeeding through early breastfeeding initiation:

"...Yes, it's good that it can also save money because, the baby needs a lot so if my child is breastfed it can save money." (Interview on April 2, 2024, with RAD)

"...Breast milk is also good deck...It's not complicated if you make it, it comes out immediately and it's warm when the baby breastfeeds. If it's milk, it's still poured first, stirred, there are many steps, so breast milk is better than formula." (Interview on April 2, 2024, with MDN)

"...Breast milk is also good for saving money, it is not complicated to make and can be drunk at any time..." (Interview on April 2, 2024, with DA)

"...My response is yes.... it's good that breast milk doesn't have a lot of expenses, if it's formula milk, it's more buying the pampres, buying other equipment for milk needs, like buying pacifiers, buying thermos, buying water, just a lot. So for me, I prefer breast milk to formula milk..." (Interview on April 2, 2024, with NA)

"...Better breast milk than milk, it costs a lot of money deck..." (Interview on May 4, 2024, with AS)

"I think it's true that breastfeeding is better and saves costs and is not complicated too, then the children become smart and healthy too" (Interview on May 4, 2024, with GB)

"...It is true that breast milk is better than formula milk, no more babeli-beli (repetitive buying)..." (Interview on May 4, 2024, with CTA)

"...Yes, breast-fed children are the same as saving daily expenses" (Interview on May 4, 2024, with YN)

"Yes, it's true, breastfeeding saves money especially now that everything is expensive and breastfeeding is not complicated to make" (Interview on May 4, 2024, with KR)

"...Yes, breast milk is good for the baby..." (Interview on May 4, 2024, with AML)

Postpartum Health Conditions of Mother and Baby

Based on the results of interviews with additional informants, namely the head of the inpatient room, midwives, and nurses (ANT, NL, and NMA), it was found that some of the obstacles in the early breastfeeding initiation process were when the mother and baby had to be separated postpartum (either due to premature or sectio caesarean delivery). This is in line with the informants' statements as follows:

"...Then as I said earlier, if a premature baby is admitted to the perina room (baby room), the mother is still encouraged to go to the perina room to breastfeed the baby, it can be pumped, the mother can go directly to the perina room to breastfeed..." (Interview on April 2, 2024, with ANT).

"...if the mother is usually immediately willing, she never refuses. If it's a caeser, they don't give IMD right away because the mother usually doesn't realize it. Then usually the SC ones (they, the mother and the baby) are separated, usually the mother goes straight down anyway... like (giving) in the baby room. So there is usually a SC baby who is separated, ... so usually the mother has removed the IV and catheter, usually (then) she goes down to give breast milk ..." (Interview on April 2, 2024, with NL)

"...So still eeee the mother if for example she feels that the breast milk dam has occurred, we advise the mother to meet the baby downstairs ... so the mother meets the baby in the children's room so she breastfeeds the child in that room ... if the mother is SC, she still breastfeeds first because tomorrow when the mother can walk, she will go there because there is also elevator access here" (Interview on April 2, 2024, with NMA).

Health worker support

Information on postpartum early breastfeeding initiation was found to be insufficiently provided to patients either in the health care process (consultation with a doctor) or before and after delivery. Based on the results of in-depth interviews with the main informants, all informants (RAD, MDN, DA, NA, AS, GB, CTA, YN, KR, and AML) stated that they had never received information about Early Breastfeeding Initiation (IMD) from RSIA Tinatapura, either through direct explanation from the doctor/midwife or through educational media such as leaflets or posters in the hospital. Some informants even confirmed that although they routinely performed immunizations or had given birth at RSIA Tinatapura, there was no delivery of information about IMD from health workers. This is in line with the informants' statements as follows:

"...I had immunization, but I never heard of IMD..." (Interview on April 2, 2024, with RAD)

"...During my immunization, I was never told by the midwife or doctor about IMD..." (Interview on 2 April 2024, with MDN)

"...I never heard of it dek." (Interview on April 2, 2024, with DA) "...No deck... I don't know about that." (IMD) " (Interview on April 2, 2024, with NA)

"...No I was given (told) about it de... from the hospital..." (Interview on May 4, 2024, with AS)

"...When I entered the hospital last night, I was not told about IMD." (Interview on May 4, 2024, with GB)

"...Here (RSIA Tinatapura) I was not given any information about IMD"... (Interview on May 4, 2024, with CTA)

"...Here, I was not told at all. I don't know about other patients. (Interview on May 4, 2024, with YN)

"...I don't know deck." (Interview on May 4, 2024, with KR)

"...I don't know dek. There is no information like that from the hospital." (Interview on May 4, 2024, with AML).

Different information was obtained from additional informants, namely the head of the inpatient ward, midwives, and nurses (ANT, NL, and NMA), who stated that they had provided information and education on Early Breastfeeding Initiation (IMD) to pregnant women and postpartum mothers. IMD is recommended immediately after the baby is born, unless there are certain conditions such as health problems in the baby or premature birth that require special handling first. Informants also actively conveyed the benefits of IMD, including the importance of breastfeeding to prevent breast milk dams and encourage bonding between mother and baby. However, the implementation of IMD is adjusted to the condition of each patient, especially if the baby requires intensive care. This is in line with the informants' statements as follows:

"...Yes, definitely! We always educate about IMD ... even then, we usually recommend IMD here after giving birth, unless for example there is a problem. Usually we immediately after the baby is born, then remove the placenta, or usually there is a problem with the baby, so we usually don't IMD immediately we first secure the baby, usually the baby nurse immediately takes the baby, after (after) that we IMD if the baby is born prematurely, there is a special handling so he has not been IMD, not immediately after birth he is not IMD immediately, because he is immediately taken care of for premature, especially premature ones usually don't cry, anyway there are just anunya (problems), so he is immediately handled by the baby nurse, even then he has not been IMD immediately because usually if the premature is so entered in the baby care first in the room, if the baby is good, usually the mother we recommend breastfeeding the baby to the Perina room.." (Interview on April 2, 2024, with ANT)

"...Yes, if you are told to breastfeed, I have if you convey it directly, you are usually told" (Interview on April 2, 2024, with NL).

"...If you give (give) education often if the doctors, pediatricians especially often dorang (they, doctors) what eee what's the name... will give ba breast milk (breastfeeding) the child instead of sufor... so if it's like a pediatrician, surely dorang (they) often educate that there is usually a breast milk dam if for example they don't train to breastfeed " (Interview on April 2, 2024, with NMA)

Furthermore, a statement from a key informant, a representative of RSIA Tinatapura (HP), stated that information on the benefits and management of breastfeeding is still delivered as part of service standards. Education is provided by nurses and midwives in all care units, especially to postpartum patients before discharge. In addition, all medical personnel, including doctors and physician assistants, play a role in delivering this information, so that pregnant and postpartum women continue to have an adequate understanding of breastfeeding. This is in line with the informants' statements as follows:

"...I mean, here there is no special group for the program, but it has been delivered and it is a standard for all eee what is the name of the midwife nurses who are on duty in all care units when patients who are about to go home who have given birth (postpartum) are educated education related to the benefits of breastfeeding. All medical personnel, even doctors, even doctor's assistants, they also help to convey ..." (Interview on April 2, 2024, with Hp)

Looking at the results of in-depth interviews with key informants related to the support of health workers after childbirth, it was found that the provision of formula milk after childbirth generally did not come from the mother's own wishes, but rather on the recommendation of health workers (doctors/midwives) on the grounds that breast milk had not yet been released. Most informants (RAD, MDN, DA, NA, AS, GB, YN, KR, and AML) stated that this decision was also supported by health workers, although they were actually willing to breastfeed if possible. This is in line with the informants' statements as follows:

"...I didn't have IMD so this milk has been suggested by the doctor, then (later) I also have breast milk that hasn't come out yet de if I don't give (not give) my child milk, so how do I want to drink my poor child to wait (wait) for my milk to come out first... huuu... my poor child is already thirsty. For my husband, he supports everything... input and advice from the doctor" (Interview on April 2, 2024, with RAD)

"...I did not have IMD... the doctor advised me to give milk to my child my milk had not yet come out, so I gave milk to my child first. My husband's support is yes... supporting whatever the doctor advises." (Interview on April 2, 2024, with MDN)

"...I did not IMD my child was given formula... this was the advice of the doctor to give formula. So for the oxytocin massage, I did not do it ... and I was also not told about it" (Interview on April 2, 2024, with DA)

"...IMD was not done that I lee... not my wish anyway just from the end of childbirth there was no IMD that deck... for formula milk this is the advice of the doctor.. then breast milk has also not come out.. so give (give) formula milk first. Support from my husband and family, always supporting what is best for me and my child. Oxytocin massage was not done by me" (Interview on April 2, 2024, with NA).

"...For formula milk, this is the doctor's advice, what else can I do de... My breast milk hasn't come out yet so inevitably I have to be given (given) formula milk..." (Interview on May 4, 2024, with AS)

"...The doctor's wish is to give milk..." (Interview on May 4, 2024, with GB)

"... Giving sufor has been the wish of my family, because my breast milk has not yet come out..." (Interview on May 4, 2024, with CTA)

"...It was the advice of the doctor..." (Interview on May 4, 2024, with YN)

"...It was the wish of the midwife and the advice of the doctor, he said to give my child milk first because my milk had not yet come out..." (Interview on May 4, 2024, with KR)

"...It was the wish of me and my family, and the midwife also told me to buy milk, I also remember that my breast milk has not yet come out so the only way is to give formula milk first..." (Interview on May 4, 2024, with AML)

Based on the results of interviews with key informants, namely the Representative of RSIA Tinatapura (HP) stated that the Hospital has provided support for the implementation of Early Breastfeeding Initiation in newborns. This is in line with the key informant's statement as follows:

"...Yes... the support is like that ... so this is like this deck ... one of the eee service standards for maternal and child hospitals in terms of services to mothers who have given birth (postpartum) or who are in the postpartum period is "eee providing education related to breastfeeding issues, the benefits of breastfeeding, the benefits of breast milk ... that's all and tinatapura hospital also does that ..."" (Interview on April 2, 2024, with HP)

Meanwhile, based on the results of interviews with additional informants, namely the head of the inpatient room, midwives, and nurses (ANT, NL, and NMA), stated that support in the implementation of Early Breastfeeding Initiation (IMD) by encouraging mothers to breastfeed immediately after delivery, even if breast milk has not been released, to stimulate its production. If the mother or baby is experiencing obstacles (such as caesarean delivery or prematurity), IMD is still encouraged with adjustments, such as pumping breast milk or breastfeeding after the condition has stabilized. When mothers refuse IMD, health workers continue to educate them about its benefits, but consider temporary formula feeding if necessary. For mothers who are separated from their babies (e.g. during caesarean delivery or neonatal care), they are encouraged to breastfeed or pump breastmilk as soon as conditions allow, with support to access the infant care room. This is in line with additional informants' statements as follows:

"...So far, dorang (they, in this case the patients) want to breastfeed their babies, but usually there are obstacles, especially first-time mothers, meaning new ... first to have children. There must be obstacles, we encourage the mother to do IMD, we still encourage the mother if for example she wants to give breast milk, it hasn't come out yet, still stimulate her to tell her to breastfeed the baby even though it hasn't come out, later if the baby is stimulated, the milk will definitely come out, but usually there are mothers who want to give formula milk, usually we advise them to keep telling them to breastfeed so that it will come out by itself But if for example it hasn't come out, you can give formula milk because if the baby doesn't drink, then he can get a fever, the baby can also turn yellow so yes, if it hasn't come out, we usually allow the mother but still it is given (given) to breastfeed the baby Then as I said earlier, if a premature baby is admitted to the perina room, the mother is still encouraged to go to the perina room to breastfeed the baby, it can be pumped, it can be directly the mother's perina money ba love (do the process) breastfeeding"(Interview on April 2, 2024, with ANT)

".... No if the mother is usually immediately willing, never refuses if the caeser is not immediately given (given) IMD because the mother is usually unconscious. Then usually the SC ones are separated, the mother usually goes downstairs to breastfeed in the baby room... so usually there are SC babies who are separated so usually the mother has the IV and catheter removed, she usually goes downstairs to breastfeed..." (Interview on April 2, 2024, with NL)

"...No, so far there is actually nothing to provide hmm what is the name eee information to patients, the babies are delivered by nurses in the baby room. so in the baby room it always educates patients. So if it's to educate, yes we educate too, but educating the mother for the first time to breastfeed must be from the perina room in the baby room like that. So still eeee the mother if for example she feels that the breast milk dam has occurred, we advise the mother to meet the baby downstairs, so the mother meets the baby in the children's room so she breastfeeds her child in that room... if the SC mother is ee.. sufor first she stays

because later tomorrow if she can walk her mother will just go there because here is also elevator access too ..." (Interview on April 2, 2024, with NMA)

Family Support (Husband/Parent)

Based on the interviews with the main informants, it was found that family support (especially husbands) in the process of initiating early breastfeeding (IMD) varied depending on the implementation of IMD itself. In cases where IMD is performed (such as the experience of AS, GB, CTA, and YN in the delivery of their first child), husbands tend to actively accompany with health workers. However, when IMD was not performed (as in RAD, MDN, DA, NA, KR, AML, and several subsequent deliveries), the husband's role was more limited to postpartum assistance. This is in line with the informants' statements as follows:

"...I didn't do IMD like you said so I wasn't accompanied except, I gave milk to my child, then. My husband accompanied me ... if the midwife only at first she delivered my child in this room, only at the beginning she taught me to hold the pacifier properly with my child. That's all the nurse said when the milk comes out, give my child breast milk to drink. For my husband, he supports everything... input and advice from the doctor " (Interview on April 2, 2024, with RAD)

"...I didn't have IMD... I just gave formula milk and that also had my husband's support my husband supported whatever the doctor suggested. " (Interview on April 2, 2024, with MDN)

"...I did not IMD my deck... my child was given (given) formula milk. My husband also knew and just followed" (Interview on April 2, 2024, with DA)

"...The midwife didn't give me IMD, then the breast milk didn't come out yet so she gave me formula first. All of this was supported by my husband and family, they always support what is best for me and my child" (Interview on April 2, 2024, with NA)

"... for the first child, I was assisted by my husband and the midwife... this second child, there was no IMD deck... And for formula milk, this is the advice of the doctor, my husband and I can't do anything else My breast milk has not yet come out so inevitably I have to be given formula milk" (Interview on May 4, 2024, with AS)

"...For me last night there was no lee If my first child was born at Untada Hospital but there was given (done / placed) on the chest, if this second child is again so new, if my first child I was accompanied by my husband with the midwife" (Interview on May 4, 2024, with GB)

"...When I gave birth to my third child here so there was no IMD, only my first child was done and even then I was born at Untada Hospital. And yesterday I was accompanied by the midwife only, my husband was not" (Interview on May 4, 2024, with CTA)

"For my third child, I did not initiate early breastfeeding, so there was no assistance, but my first and second children were accompanied by the midwife and my husband " (Interview on May 4, 2024, with YN)

"There was no IMD for me. How can I be accompanied, my husband was afraid to see me give birth" (Interview on May 4, 2024, with KR)

"I didn't have a midwife last night to do that (IMD), just after giving birth my baby came out, immediately dorang (they, the health workers) took it to the baby room" (Interview on May 4, 2024, with AML)

DISCUSSION

Early initiation of breastfeeding

The implementation of early breastfeeding initiation (IMD) at RSIA Tinatapura Palu was not optimal despite being part of the national policy and international practice standards launched by WHO. Recommendations given for postpartum mothers by the WHO are for early and uninterrupted skin-to-skin contact between mother and baby which should be facilitated and encouraged as soon as possible after birth (17). In addition, mothers should receive practical support to enable them to initiate breastfeeding and overcome any difficulties encountered in the process. The aim of breastfeeding an infant within the first hour after birth is to ensure the infant receives colostrum, or "first milk", which is rich in essential nutrients for the infant as a protective factor. Colostrum, as part of breastmilk, is rich in immunologic substances that protect infants from respiratory infections, gastrointestinal pathogens, and sepsis in the neonatal period. Breastfeeding also supports intestinal development and recovery of epithelial tissue damaged by infection (18). Providing colostrum during early breastfeeding initiation and practicing exclusive breastfeeding can

reduce the risk of various infections, including sepsis, ARI (acute respiratory infections), meningitis, omphalitis and diarrhea. These diseases are the leading causes of under-five mortality in developing countries (19).

The results of the study also showed that the implementation of early breastfeeding initiation was not in accordance with Government Regulation of the Republic of Indonesia Number 28 of 2024 concerning Regulations for the Implementation of Law Number 17 of 2023 concerning Health, that article 10 states that Maternal Health Efforts are carried out during pre-pregnancy, pregnancy, childbirth, and postpartum through efforts including promotive, preventive, curative, and rehabilitative efforts. In article 11, one of the Maternal Health Efforts in childbirth and postpartum is the implementation of early breastfeeding initiation carried out by mothers to newborns. Then in article 12, it is stated that Maternal Health Efforts are carried out by Medical and Health Personnel in accordance with their competence and authority. Then it can also be assisted by Health Support or Support Personnel in accordance with their competence and authority. Article 14 also states that, in the implementation of Maternal Health Efforts, one of the roles of the family is to ensure that the mother gets health services and supports the mother during the pre-pregnancy, pregnancy, delivery, and postpartum period, including assistance in providing early breastfeeding initiation (20). Recent evidence also suggests that skin-to-skin contact between mother and infant immediately after birth helps initiate early breastfeeding and increases the likelihood of exclusive breastfeeding for the first one to six months of life as well as the overall duration of breastfeeding. Infants placed in early skin-to-skin contact with their mothers also appear to interact more with their mothers (4,21).

Based on the framework of The Building Blocks of Health System from the World Health Organization (WHO) in 2007, the health system must intervene, one of which is prevention and promotion efforts in providing public health services in health facilities. For this reason, in providing public health services, several components of the health system need to be strengthened, especially in the implementation of early breastfeeding initiation in health facilities, including: health services, health workforce, health information systems, and leadership / governance (22).

When viewed from the health system component, namely health services, based on the results of the study, it appears that early breastfeeding initiation (IMD), which should ideally be carried out within the first hour after birth, is still not optimally implemented, especially in cases of caesarean delivery or babies with special conditions. This reflects that health services are not timely and of high quality. Inefficiencies in the utilization of time and resources contribute to the suboptimal implementation of early breastfeeding interventions. According to WHO's The Building Blocks of Health System theory, good health services are a crucial component in improving the health status of mothers and infants through early breastfeeding initiation. Although the form and content of services may vary from country to country, a well-functioning health system must have an efficient, responsive and quality service network (22). Therefore, this condition shows that there are still gaps in the health service system, especially in ensuring the implementation of IMD as a whole, so that improvements need to be made so that health services, in this case the provision of early postpartum breastfeeding initiation, are able to meet the characteristics of an effective system as recommended by WHO.

In addition, in another health system component, namely health workers, the results showed that most mothers did not receive education or guidance related to early breastfeeding initiation (IMD) from health workers, reflecting the lack of responsiveness and productivity of health workers in providing important information, even though the hospital stated that it had conducted training. This could be due to uneven distribution of staff or high workload. According to WHO's The Building Blocks of Health System theory, health workers play an important role in the achievement of health goals, which is highly dependent on the knowledge, skills, motivation, and deployment of health workers. Human resource shortages, unbalanced distribution, and inappropriate skills are common challenges in some health care facilities. Therefore, to ensure optimal IMD implementation, it is necessary to strengthen the capacity of health workers and a more equitable distribution so that health workers are able to effectively provide educational and promotive services according to the needs of the community. This can be realized with support from other health system components, namely leadership and governance (22). Hospitals need to develop a strategic policy framework, ensure supervision of IMD implementation, and build a transparent accountability system to the maximum extent to support national programs, especially in improving maternal and postpartum health efforts. All mothers should be supported to initiate breastfeeding as soon as possible after birth or within the first hour after delivery. In addition, mothers should receive practical support to facilitate their initiation of breastfeeding and to overcome any difficulties encountered in the process.

This study also extends the existing evidence to include specific barriers to early breastfeeding where internal and external factors play an important role in implementation. This highlights the need for more structured and sustainable strategies, including increased socialization, direct mentoring, and monitoring of early breastfeeding implementation to ensure alignment between policy, clinical practice, and maternal knowledge to support early

breastfeeding implementation.

1. Internal factors inhibiting early initiation of breastfeeding

Maternal Knowledge of Early Breastfeeding Initiation

Some of the factors that influence low maternal knowledge are lack of education from health workers, inconsistency of information at health facilities, and ignorance of the benefits of early breastfeeding initiation. The implication of this ignorance is that mothers do not realize or demand self-initiation of breastfeeding because they are not aware of their rights. It is then easier for mothers to accept formula feeding if breastmilk has not been released, without optimal efforts to initiate early breastfeeding first.

Another fact found was the perception towards exclusive breastfeeding and formula milk. Although all informants had a positive perception of breastfeeding, considering it more practical, cost-effective and healthy, early breastfeeding through early breastfeeding initiation remained low. Some of the reasons that emerged from the informants were that breastfeeding was considered better in theory, but formula milk was still given due to impatience in waiting for the milk to come out. There is also a lack of support from health workers, especially in guiding the implementation of early breastfeeding initiation, so mothers immediately switch to formula milk. In addition, there was no education about the importance of colostrum for newborns, so some mothers thought that breast milk had not been produced if only colostrum was produced.

The results of this study are in line with Sukarti, et al (2020) who state that the problems that hinder the implementation of early breastfeeding initiation are maternal unpreparedness due to lack of understanding and knowledge, counseling that is still lacking by health workers, and low early breastfeeding initiation practices. In addition, uncooperative mothers sometimes make it difficult for health workers so that they cannot initiate early breastfeeding (23). Another study by Indasari et al (2023), stated that one of the success factors of early breastfeeding initiation is maternal knowledge (15).

Another study by Sihota, et al (2019) stated that breastfeeding can strengthen the immune system of infants. However, it was still found that some mothers often lack knowledge about breastfeeding (20). Young men or husbands also often have more negative breastfeeding norms than women (24). Therefore, it is important to provide knowledge to the spouse about the benefits of breastfeeding for the health of both mother and baby. The advantage of breastfeeding is that the mother can form a close bond with the baby. If breastfeeding can facilitate feelings of emotional closeness with the infant, then mothers consider it a motivation to maintain breastfeeding (25).

Postpartum Mother and Baby Condition

The condition of the mother and baby after delivery can be an obstacle to the implementation of early breastfeeding initiation, especially in cases of *Sectio Caesarea* (SC) delivery and premature birth conditions. In fact, it was found that mothers who gave birth by SC were not immediately given early breastfeeding initiation because their physical condition had not recovered (for example, still under the influence of anesthesia, not fully conscious, or still attached to IVs/catheters). Then, the baby is often temporarily separated from the mother and taken to the infant care room. In addition, early initiation of breastfeeding is only done after the mother is stable, usually when the IV and catheter have been removed, and the mother is able to walk (usually several hours or days postpartum). This certainly has an impact on the provision of early breastfeeding initiation in the form of delayed skin-to-skin contact so that the stimulation of milk production is not optimal, the baby is more at risk of being given formula milk before having the opportunity to suckle directly from the mother, and the emotional bonding between mother and baby is disrupted due to the delay in the first interaction.

In addition, if the baby is born prematurely or has a Low Birth Weight (LBW), it will usually require special care such as the baby being taken directly to the perina room for intensive care. However, mothers still need to be encouraged to breastfeed by pumping or breastfeeding directly if the baby's condition allows. This can also have an impact in that early initiation of breastfeeding cannot be done immediately because the baby needs medical stabilization, and the risk of formula feeding increases if breast milk is not produced immediately. Another inhibiting factor is also the limited number of health workers, so that if the condition of the mother and baby after childbirth does not allow for early breastfeeding initiation, then health workers have difficulty assisting with early breastfeeding initiation if they have to focus on emergency medical treatment for mothers and babies. This is in line with the statement from the International Federation of Gynecology and Obstetrics (2023), that factors that affect early initiation are less than optimal health conditions, complicated pregnancies, and Caesarean delivery (3). Another study also conducted by Yaya et al (2020) found that one of the factors statistically associated with the practice of early

breastfeeding initiation was the health condition of the mother and newborn at the time of delivery, the size of the newborn, and the benefits perceived by the mother (26).

Despite these conditions, health workers encouraged mothers and babies to meet as soon as possible to initiate early breastfeeding. This practice demonstrates the commitment of health facilities to support breastfeeding even when the infant's health condition is less than optimal, while still considering the physical condition of the mother postpartum. Thus, if sustaining breastfeeding can continue, then improving the nutritional status of mothers and infants can also be implemented optimally. 568

2. External factors inhibiting early initiation of breastfeeding

Health worker support

In general, health workers and hospitals expressed support for the implementation of early breastfeeding initiation through education, which has become a routine part of maternal and neonatal health services. Early breastfeeding initiation is recommended as soon as the baby is born, unless there are certain conditions such as health problems in the postpartum mother or in babies with premature birth that require special treatment first. All health workers also reported actively communicating the benefits of early breastfeeding initiation, including the importance of breastfeeding to prevent milk dams and encourage bonding between mother and baby. However, the implementation of early breastfeeding is tailored to the condition of each patient, especially if the baby requires intensive care. However, this study found a gap between statements of support from health workers and the practice of early breastfeeding initiation at RSIA Tinatapura Palu.

Although health workers claimed to have provided education on early breastfeeding initiation, it turned out that the majority of postpartum mothers at RSIA Tinatapura Palu stated that they had never received information about early breastfeeding initiation either through consultation, counseling, or educational media while being treated at RSIA Tinatapura Palu, but formula milk was recommended by health workers in 9 out of 10 cases without optimal efforts to implement early breastfeeding initiation first. This inconsistency was exacerbated by the absence of clear protocols, educational documentation, or firm policies on formula feeding.

Lack of support from health workers can hinder the success of early breastfeeding initiation (IMD). The role of healthcare workers is crucial in improving the implementation of early breastfeeding initiation, as they are the first to educate mothers about the procedure and motivate them to perform it immediately after delivery.

This study is in line with Nursika and Putri (2023) who stated that mothers with limited access to information about early breastfeeding initiation were 3.6 times more likely not to perform early breastfeeding initiation than mothers who received adequate information. The more complete the information received, the easier it is for mothers to understand and receive health education related to early breastfeeding initiation, which ultimately affects their willingness to carry out early breastfeeding initiation. Therefore, health workers should be more aggressive in providing education or counseling on early breastfeeding initiation to improve understanding and practice of early breastfeeding initiation among postpartum mothers (27).

Another study also stated that the support of health workers in the implementation of early breastfeeding initiation is also due to a very low understanding of their roles and responsibilities according to Government Regulation No. 33/2012. Research conducted at Dr. Abdul Rivai Hospital found that all health staff had never attended training on early breastfeeding initiation procedures. Not only that, the hospital also did not have a specific policy or regulation governing the practice of early breastfeeding initiation. So that the role of health workers in the implementation of early breastfeeding initiation at RSUD Dr. Abdul Rivai Berau Regency has not been running optimally both as a *caregiver* and as an educator (28).

Improving maternal and infant postpartum health efforts, health services in the form of implementing early breastfeeding initiation require comprehensive efforts in the form of increasing the competence of health workers through continuous training programs, establishing specific regulations governing the standards for implementing early breastfeeding initiation and implementing stricter policies against formula feeding without medical indications, and providing adequate supporting infrastructure. These strategic measures may include three main aspects, namely the development of human resources through regular education and training, the creation of a legal umbrella through binding hospital policies, and the preparation of physical facilities that support the successful practice of early breastfeeding initiation in RSIA Tinatapura Palu. This comprehensive improvement of health services is important to ensure that every mother and baby gets the right to early breastfeeding initiation according to established standards.

Family Support

In general, husband and family participation was relatively good, especially in following the doctor's advice and providing moral support, although it was not fully directed to support early breastfeeding initiation. The practice of early breastfeeding initiation is also not the same from birth to birth, with some mothers only receiving early breastfeeding initiation for their first child, indicating different protocols in different health services. The habit of immediately giving formula milk without maximum efforts to trigger milk production can hinder the success of exclusive breastfeeding.

Family support, both informational and emotional, plays a crucial role in the success of early initiation of breastfeeding and breastfeeding. Families can boost the confidence of postpartum mothers while influencing the milk ejection reflex, which is highly dependent on the mother's psychological state. This form of support includes providing information, emotional support, and practical assistance. Parental education and family support are key determinants in a postpartum mother's decision to breastfeed. IMD itself is a critical factor that determines the success of exclusive breastfeeding, because it is able to stimulate milk production from the beginning. This study is in line with Nuriska and Putri (2023) who stated that family support is very influential on the condition of mothers in the postpartum period (27).

This study is also in line with Fitria and Antari (2024) who stated that family support has a significant relationship with the success of exclusive breastfeeding through early breastfeeding initiation (29). Family support can be influenced by various things, such as experience, encouragement, and individual traits. Families who have experienced the positive benefits of exclusive breastfeeding are generally more active in encouraging mothers to breastfeed their babies. The good support can change the behavior of mothers. So the better the support provided the better the implementation of early breastfeeding initiation.

Comparison with Previous Studies

This study not only reinforces previous findings on the crucial role of maternal knowledge and health worker support in the implementation of early breastfeeding initiation, but also identifies a unique problem in Palu City of inconsistent hospital policies and the absence of specific early breastfeeding initiation protocols for specific cases such as Caesarean delivery or premature infants. These findings make a novel contribution to the literature by highlighting the urgency of a more structured and comprehensive policy approach at the health facility level to ensure optimal IMD implementation.

Limitations and Cautions

This study has several weaknesses, including the qualitative approach that was only conducted in one research location, so the results cannot be applied generally. The possibility of participant recall bias and subjectivity in qualitative data analysis may also affect the accuracy of the findings. The resulting recommendations need to be applied with special consideration considering the specific socio-cultural characteristics of Palu City may differ from other regions. To deepen the findings, further research is needed using quantitative methods with a larger sample size and wider area coverage.

Recommendations for Future Research

Further studies that combine qualitative and quantitative approaches with a larger number of respondents and a variety of research locations are needed to increase the strength of the evidence. Similar research should be extended to different types of health facilities to test the applicability of the findings across different contexts. Future research should include an in-depth analysis of the role of institutional policies, health worker work patterns, and socio-cultural aspects that influence IMD. Intervention-based research is also needed to test the effectiveness of structured training programs for health workers and mothers-to-be. Equally important is longitudinal research to monitor the ongoing impact of IMD policy implementation on the long-term success of exclusive breastfeeding.

CONCLUSION

This study shows that the implementation of early breastfeeding initiation in RSIA Tinatapura Palu is still not running optimally, with the main obstacles including limited maternal understanding, inconsistency of institutional regulations, and suboptimal support from health workers. The results of this study not only confirm the findings of previous studies, but also emphasize the importance of comprehensive strategies such as improving educational programs, establishing standardized clinical guidelines, and stronger synergy between medical personnel and families. The policy recommendations formulated are expected to serve as a basis for improving the

implementation of IMD in order to support the success of exclusive breastfeeding in the Central Sulawesi region, as well as contribute to the formulation of better maternal and child health policies at the national level. 669

STATEMENT OF AUTHORS' CONTRIBUTIONS

The first author was responsible for the conceptualization of the study, data collection, analysis, and writing of the manuscript. The second and third authors contributed to methodology refinement, data validation, and manuscript revision to ensure accuracy and depth of analysis.

CONFLICT OF INTEREST

The authors hereby declare that there are no conflicts of interest, either financial or non-financial, that could affect the objectivity or findings of this study.

STATEMENTS ABOUT GENERATIVE AI TECHNOLOGY AND AI ASSISTIVE TECHNOLOGY IN THE WRITING PROCESS

During the writing process, the authors used DeepL as a translation tool to improve language quality; however, all substantial content, data interpretation, and research conclusions are the original work of the authors.

FUNDING SOURCE STATEMENT

This research received no special funding from any institution and was fully funded by the authors and their affiliated institutions.

ACKNOWLEDGMENTS

The authors would like to thank Tinatapura Mother and Child Hospital Palu for facilitating the study, all participating informants, and colleagues who provided valuable input during the completion of this scientific work.

BIBLIOGRAPHY

1. World Health Organization (WHO). Early initiation of breastfeeding to promote exclusive breastfeeding. Available from: <https://www.who.int/tools/elena/interventions/early-breastfeeding>
2. United Nations Children's Fund (UNICEF). Breastfeeding and the Sustainable Development Goals Factsheet. 2016. Available from: <https://worldbreastfeedingweek.org/2016/pdf/BreastfeedingandSDGsMessaging%20WBW2016%20Shared.pdf>
3. The International Federation of Gynecology and Obstetrics (FIGO). Harnessing the golden hour: breastfeeding recommended within first hour of life. 2023. Available from: https://www.figo.org/sites/default/files/2023-07/FIGO%20Statement_breastfeeding%20recommended%20within%20first%20hour%20of%20life_2023.pdf
4. World Health Organization (WHO). Breastfeeding. Available from: www.who.int/health-topics/breastfeeding
5. World Health Organization Indonesia. Ibu Membutuhkan Lebih Banyak Dukungan Menyusui Selama Masa Kritis Bayi Baru Lahir. 2024. Available from: <https://www.who.int/indonesia/id/news/detail/01-08-2024-mothers-need-more-breastfeeding-support-during-critical-newborn-period#>
6. Kementerian Kesehatan Republik Indonesia. Buku Saku Hasil Studi Status Gizi Indonesia (SSGI) Tahun 2021. Jakarta Pusat: Badan Kebijakan Pembangunan Kesehatan. Kementerian Kesehatan Republik Indonesia; 2022. Available from: <https://drive.google.com/file/d/1p5fAfI53U0sStfaLDCTmbUmF92RDRhmS/view>
7. Kementerian Kesehatan Republik Indonesia. Buku Saku Hasil Survei Status Gizi Indonesia (SSGI). 2022. Jakarta Pusat: Badan Kebijakan Pembangunan Kesehatan. Kementerian Kesehatan Republik Indonesia; 2023. Available from: <https://drive.google.com/file/d/1v6ceJIVFCVCBdrzbdDNCj6T4ZbadVBi/view>
8. Kementerian Kesehatan Republik Indonesia. Survei Kesehatan Indonesia (SKI). 2023. Jakarta Pusat: Badan Kebijakan Pembangunan Kesehatan. Kementerian Kesehatan Republik Indonesia; 2023. Available from: https://drive.google.com/file/d/1rjNDG_f8xG6-Y9wmhJUnXhJ-vUFevVJC/view

9. Dinas Kesehatan Provinsi Sulawesi Tengah. Profil Dinas Kesehatan Provinsi Sulawesi Tengah Tahun 2021. Sulawesi Tengah. Dinas Kesehatan Provinsi Sulawesi Tengah; 2022. Available from: <https://dinkes.sultengprov.go.id/wp-content/uploads/2022/05/PROFIL-DINAS-KESEHATAN-2021.pdf>
10. Dinas Kesehatan Provinsi Sulawesi Tengah. Profil Dinas Kesehatan Provinsi Sulawesi Tengah Tahun 2022. Sulawesi Tengah. Dinas Kesehatan Provinsi Sulawesi Tengah; 2023. Available from: <https://dinkes.sultengprov.go.id/wp-content/uploads/2023/06/Profil-KEsehatan-2022.pdf>
11. Dinas Kesehatan Provinsi Sulawesi Tengah. Profil Dinas Kesehatan Provinsi Sulawesi Tengah Tahun 2023. Sulawesi Tengah. Dinas Kesehatan Provinsi Sulawesi Tengah; 2024. Available from: <https://dinkes.sultengprov.go.id/wp-content/uploads/2024/06/profil-kesehatan-2023.pdf>
12. Purwanto Hendra. Profil Rumah Sakit Ibu dan Anak Tinatapura Palu. 2023. Available from: <https://rsiatinatapurapalu.wordpress.com/visi-dan-misi/>
13. Dwi Riyanti, 2023, Hubungan Inisiasi Menyusui Dini (IMD) Dengan Kecukupan Asi Dan Kejadian Ikterus Pada Bayi Baru Lahir Di Rumah Sakit Umum Haji Surabaya. Skripsi thesis. Fakultas Keperawatan Universitas Airlangga Surabaya. Surabaya. Available from: https://repository.unair.ac.id/122983/1/Dwi%20Riyanti_13111180%20%28br%29%20UNGGAH%20FINAL%202.pdf
14. Tschiderer L, Seekircher L, Kunutsor SK, et al. Breastfeeding is associated with a reduced maternal cardiovascular risk: Systematic review and meta-analysis involving data from 8 studies and 1 192 700 parous women. 2022. *Journal of the American Heart Association*. 2022 Jan 18;11(2):e022746. Doi: 10.1161/JAHA.121.022746. Available from: <https://pubmed.ncbi.nlm.nih.gov/articles/PMC9238515/>
15. Indrasari, N., dan Oktaviana, A. Hubungan Pengetahuan Ibu Terhadap Keberhasilan IMD Pada Ibu Bersalin. 2023 *Jurnal Maternitas Aisyah (Jaman Aisyah)*, 4(2), 175-185. Doi: <https://doi.org/10.30604/jaman.v4i2.1101>. Available from: <file:///Users/user/Downloads/1101-Article%20Text-2226-1-10-20230606.pdf>
16. Kasmawati Kasmawati, & Asmaul Husnah. (2024). Hubungan Pemberian Inisiasi Menyusu Dini dan Asi dengan Daya Tahan Tubuh Bayi di Puskesmas Tolo Kabupaten Jenepono. *OBAT: Jurnal Riset Ilmu Farmasi Dan Kesehatan*, 2(1), 203–212. Doi: <https://doi.org/10.61132/obat.v2i1.262> . Available from: <https://journal.arikesi.or.id/index.php/OBAT/article/view/262/265>
17. World Health Organization (WHO). World Breastfeeding Week 2023. Available from: <https://www.who.int/campaigns/world-breastfeeding-week/2023>
18. Ekholuenetale M, Barrow A. What does early initiation and duration of breastfeeding have to do with childhood mortality? Analysis of pooled population-based data in 35 sub-Saharan African countries. *International Breastfeeding Journal* 2021;16:1–9.27. Available from: <https://internationalbreastfeedingjournal.biomedcentral.com/articles/10.1186/s13006-021-00440-x>
19. Pretorius CE, Asare H, Genuneit J, Kruger HS, Ricci C. Impact of breastfeeding on mortality in sub-Saharan Africa: a systematic review, meta-analysis, and cost-evaluation. *Eur J Pediatr* 2020;179:1213–25. Available from: <https://pubmed.ncbi.nlm.nih.gov/32592027/>
20. Peraturan Pemerintah Nomor 28 Tahun 2024 tentang Peraturan Pelaksanaan Undang-Undang Nomor 17 Tahun 2023 tentang Kesehatan. Available from: <https://peraturan.bpk.go.id/details/294077/pp-no-28-tahun-2024>
21. Sihota H, Oliffe J, Kelly MT, McCuaig F. Fathers’ experiences and perspectives of breastfeeding: a scoping review. *Am J Mens Health*. 2019;13(3):1557988319851616. Available from: <https://pubmed.ncbi.nlm.nih.gov/articles/PMC6537273/>
22. World Health Organization 2010. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: WHO Press. Available from: <https://iris.who.int/bitstream/handle/10665/258734/9789241564052-eng.pdf>
23. Sukarti, N, N., Windiani T, A, G,I., Kurniati, Y, D. Hambatan Keberhasilan Pelaksanaan Inisiasi Menyusu Dini (IMD) pada Ibu Bersalin di Rumah Sakit Umum Pusat Sanglah Denpasar. 2020. *Jurnal Ilmiah Kebidanan (The Journal Of Midwifery)*, Vol. 8 No.1 Tahun 2020. Doi: <https://doi.org/10.33992/jik.v8i1.1197>. Available from: <https://ejournal.poltekkes-denpasar.ac.id/index.php/JIK/article/view/1197/409>
24. Swanson V, Hannula L, Eriksson L, Wallin MH, Strutton J. ‘Both parents should care for babies’: a cross-sectional, cross-cultural comparison of adolescents’ breastfeeding intentions, and the influence of shared-

- parenting beliefs. BMC Pregnancy Childbirth. 2017;17:204. DOI 10.1186/s12884-017-1372-y. Available from: <file:///Users/user/Downloads/s12884-017-1372-y.pdf>
25. Hauck YL, Blixt I, Hildingsson I, Gallagher L, Rubertsson C, Thomson B, et al. Australian, Irish and Swedish women's perceptions of what assisted them to breastfeed for six months: exploratory design using critical incident technique. BMC Public Health. 2016;16:1067. DOI 10.1186/s12889-016-3740-3. Available from: <file:///Users/user/Downloads/s12889-016-3740-3.pdf>
26. Yaya S, Bishwajit G, Shibre G, Buh A. Timely initiation of breastfeeding in Zimbabwe: evidence from the demographic and health surveys 1994–2015. International Breastfeeding Journal 2020;15(1):1–7. Available from: <https://internationalbreastfeedingjournal.biomedcentral.com/articles/10.1186/s13006-020-00255-2>
27. Nursika, I., dan Putri, R. Hubungan Sumber Informasi, Dukungan Keluarga Dan Dukungan Tenaga Kesehatan Terhadap Pelaksanaan Inisiasi Menyusu Dini Di Puskesmas Karangpawitan Kabupaten Garut Tahun 2023. SENTRI: Jurnal Riset Ilmiah Vol.2, No.10 Oktober 2023. Doi: <https://doi.org/10.55681/sentri.v2i10.1665> . Available from: <https://ejournal.nusantaraglobal.ac.id/index.php/sentri/article/view/1665/1619>
28. Suzana, B, N., Padmawati, S, R., dan Ratrikaningtyas. Peran Tenaga Kesehatan Dalam Pelaksanaan Inisiasi Menyusu Dini (IMD) (Studi Kualitatif Di RSUD Dr. Abdul Rivai Kabupaten Berau). 2024. Tesis. S2 Ilmu Kesehatan Masyarakat. Universitas Gadjah Mada. Available from: <https://etd.repository.ugm.ac.id/penelitian/detail/244041>
29. Fitria, R dan Antari., G. Dukungan Keluarga dan Inisiasi MenyusuDini (IMD) dalam Keberhasilan Pemberian ASI Eksklusif. 2024. OMJ (Optimal Midwife Journal), Volume 1, No. 2, Desember 2024, (Hal. 20-31). DOI <https://doi.org/10.1234/k8sk5285>. Available from: <https://journal.optimalbynfc.com/index.php/omj/article/view/21>