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Qualitative study: Caregiver's perception of the social-emotional development of children given infant massage as a daily affective touch

Ni Nyoman Ayuk Widiani*, Made Pradnyawati Chania, Ni Ketut Ayu Sugiartini, Ni Made Rai Widiastuti, Ni Made Ari Febriyanti, Ni Wayan Sukma Adnyani

Department of Mirwifery, Politeknik Kesehatan Kartini Bali
Jalan Tukad Barito Timur No.57, Renon, Denpasar, Bali, Indonesia

Corresponding author : ayukwidiani070288@gmail.com

ABSTRACT

Background*: Affective touch aims to convey affection to children. This touch is closely related to emotional needs and social bonds, which strengthen relationships between individuals. Children in orphanages often experience a lack of affective touch, which causes persistent stress.*
Objectives: *To determine caregivers' perceptions of the social-emotional development of babies and children who receive baby massage as daily affective touch at the Metta Mama and Maggha Foundations.*
Methods*: This research is a qualitative study with a phenomenological approach. The sample consisted of 25 caregivers, using the total population. Data was collected through focus group discussions (FGDs), with each group consisting of 8-9 caregivers.*
Results*: Some participants have the perception that a socially healthy child is a child who is able to adapt and interact with others, some participants have the perception that children need social-emotional aspects such as the need for affection, attention, the need to be loved, a sense of security, and a desire to be understood, some participants have the perception that the role of caregivers is very large because it replaces the role of parents, most participants said that baby massage has been done on children aged 0-6 months, some participants have the perception that baby massage can affect the calmness, comfort of babies so that they can be more optimal in carrying out daily activities, some participants have the perception that children who are socially-emotionally healthy behave more understandingly, confidently and more quickly accept the information given and all participants have the perception that it is very important to apply parenting patterns with touch, because of the lack of touch in orphanages.*
Conclusions: *According to caregivers at the Metta Mama & Maggha Foundation, it is important to implement parenting patterns with touch in the form of baby massage as Daily Affective Touch in children's social-emotional development.*

KEYWORD *: affective touch; baby massage; caregiver; development; perception*

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INTRODUCTION

Touch is the first sensation to develop in the embryo, and has lifelong benefits on the reactivity of the endocrine and autonomic nervous systems to stressors (1). Touch is the primary sensory channel for parent-infant interaction and is believed to account for 70% of all communication within the couple (2)(3). Touch is not only limited to physiological aspects such as physical needs, growth and development of the child, but also influences psychological, social and even cultural states. As a fundamental element in social interaction, touch not only influences interpersonal relationships but also plays a crucial role in an individual's emotional development (4). Several studies have reported that early caregiving touch interactions are associated with a reduction in the stress-responsive neuroendocrine system in humans and non-human mammals (5). For example, skin-to-skin contact has proven clinical benefits for premature infants (6). Brief daily tactile interventions that provide brief stroking movements, passive flexion and extension of limbs lead to faster physical growth, reduce stress-related behaviors and improve neuroendocrine and cognitive development in premature infants (7).

In addition, affiliative social behaviors, which involve touch interactions, have a stress-relieving effect. For example, babies who are touched during social interactions cry less than babies who are not touched (8)(9). Children in institutions such as foundations and orphanages are often deprived of affective touch. This lack of touch often leads to persistent stress. Infants and children in institutions such as foundations and orphanages typically receive little touch from caregivers, which contributes to their later cognitive delays and neurodevelopmental delays (10). The cognitive skills of children who experience this deprivation are often below average when compared to children of the same age who are raised in families (11). Unfortunately, these deficiencies and associated developmental delays appear to persist for years after adoption. Children raised in institutions who receive less care and physical touch are also at higher risk for behavioral, emotional, and social problems (12). Thus become the urgency of this study to determine caregivers' perceptions on children's social development.

Massage therapy is one of the most effective forms of touch. It has been used primarily to treat pain, although it is increasingly being used for other issues including occupational stress, depression, autoimmune conditions such as asthma, dermatitis, and diabetes, and immune-mediated conditions, particularly cancer. Its benefits of increased serotonin levels, along with improved attention, decreased depression, and improved immune function, including increased *natural killer cells*, make massage therapy one of the most effective forms of touch (13). The Metta Mama and Maggha Foundation, located in Denpasar, Bali, is a foundation for abandoned or abandoned babies, a shelter that believes that every child

and pregnant mother has the same rights and can be their own person. This foundation also serves as a shelter where individuals are accepted and nurtured to grow into happy, loving, caring, and self-confident individuals. The Metta Mama & Maggha Foundation pays attention to the development of the early stages of babies, including several aspects of functional abilities, namely, cognitive, motor, emotional, social, and language. Activities that have become routine activities for sensory and motor stimulation of babies at the Foundation include baby massage, which is carried out by midwives every day for every baby at the Foundation. It is hoped that affective touch stimulation through baby massage activities can overcome delays in cognitive, motor, emotional, social, and language development (14). However, in this regard, no study has ever been conducted on *caregivers' perceptions* of the social-emotional development of babies and children at the Metta Mama & Maggha Foundation. The aim of this study was to determine *caregivers' perceptions* of the social-emotional development of infants and children who received baby massage as *a daily activity. affective touch* at the Metta Mama & Maggha Foundation.

MATERIALS AND METHODS

This type of research is qualitative research with a phenomenological approach. The research was conducted in July - September 2024 at the Metta Mama & Maggha Foundation. The sample in this study were caregivers who were midwives and nurses at the Metta Mama & Maggha Foundation, totaling 25 people. The sampling technique in this study used total sampling, namely using the entire population as a sample. The variable in this study was the caregiver's perception of the social-emotional development of children who were given baby massage as *daily affective touch*. Data collection was carried out through the FGD process, where one FGD group consisted of 8-9 caregivers. The FGD guide contained questions related to *the caregiver's perception* of the social-emotional development of children who were given baby massage as *daily affective touch.* The interview guide used in study was originally developed by the researcher. Prior to data collection, the guide was pilot-tested with ten midwives at another foundation to ensure clarity, relevance, and feasibility. This research has received approval from the Research Ethics Committee with a certificate number 040/KEPK/DI/PKKB/2024.

RESULTS AND DISCUSSION

RESULTS

The results of this study obtained seven themes, namely caregiver perceptions of the definition of a child who is socially-emotionally healthy; caregiver perceptions of children's social-emotional needs; caregiver perceptions of the role of caregivers in children's social-emotional development; caregiver perceptions of the definition of *affective touch* ;caregiver perceptions of the influence of

providing baby massage as *affective touch* in children's social-emotional development; caregiver perceptions of how important the influence of social-emotional aspects is on children's daily behavior; and caregiver perceptions of the integration of affective touch into childcare patterns at the Meta Mama Maggha Foundation.

Caregiver perceptions of the definition of a socially-emotionally healthy child

In this theme, the results obtained were that some participants perceived a socially healthy child as one who is able to get along with friends, interact with them, and can communicate with *caregivers* and peers. Meanwhile, according to some participants, an emotionally healthy child is one who can express their emotions, recognize their own feelings, and understand directions from their caregivers. Some participants also perceived a socially-emotionally healthy child as one who is not easily afraid when meeting new people or when introduced to a new environment. Based on the results of interviews with participants, the answers expressed were as follows:

…. Menurut saya, anak yang sehat secara sosial adalah anak yang bisa bergaul dengan temannya, mampu berinteraksi dengan teman-temannya, bisa diajak komunikasi oleh mama bidan maupun dengan teman lainnya (In my opinion, a socially healthy child is a child who can socialize with his friends, is able to interact with his friends, can be invited to communicate with the midwife or with other friends).

…. Menurut saya pribadi, anak yang sehat secara emosional itu adalah anak yang bisa mengontrol emosinya, dan bisa mengerti apa arahan dari mamanya, misal tidak boleh melakukan sesuatu, ia bisa mengerti dan bisa mengikuti/ menurut mamanya (In my personal opinion, an emotionally healthy child is a child who can control his emotions and understand his mother's instructions, for example, not being allowed to do something, he can understand and follow/obey his mother)…

…. Menurut saya, bayi yang dikatakan sehat secara sosial dan emosional itu adalah bayi yang mengenali perasaannya sendiri, seperti oh saya sedang marah, saya sedang senang (In my opinion, a baby who is said to be socially and emotionally healthy is a baby who recognizes his own feelings, such as oh I'm angry, I'm happy)….

Caregiver perceptions of children's social-emotional needs

In the FGD discussion, some participants perceived that children's socio-emotional needs include affection, attention, love, security, and understanding. Some also perceived that children's socio-emotional needs include positive affirmation, kind words, and praise. Some also perceived that children's social needs include the need to interact with their peers. Based on the results of interviews with participants, the answers expressed were as follows:

…. Menurut saya, kebutuhannya itu adalah kebutuhan akan kasih sayang. Kasih sayang dan perhatian yang kita berikan dapat membentuk emosi dan sosial anak (In my opinion, the need is for affection. The affection and attention we give can shape a child's emotional and social development)….

…. Menurut saya, kebutuhan emosional anak itu adalah rasa ingin dicintai, rasa aman, dan rasa ingin dimengerti (In my opinion, a child's emotional needs are the desire to be loved, to feel safe, and to be understood)….

…. Kebutuhan untuk diberikan afirmasi, diberikan kata-kata yang baik, diberikan pujian apabila berhasil melakukan sesuatu yang kita minta (The need to be given affirmation, given kind words, given praise when we succeed in doing something we ask for)….

…. Kebutuhan untuk berinteraksi dengan teman-teman sebayanya (The need to interact with peers)….

…. Kalau utk kebutuhan emosionalnya, semisal untuk anak usia 1-3 tahun belum bisa mengenali dan mengendalikan emosinya, terkadang ada sesuatu yang tidak bisa dia ungkapkan tetapi kita tidak mengerti dan akhirnya tantrum, di sana kita memberikan pelukan, sentuhan, dan kasih sayang, sehingga terpenuhi kebutuhan emosionalnya (For emotional needs, for example, children aged 1-3 years cannot yet recognize and control their emotions, sometimes there is something they cannot express but we do not understand and end up throwing a tantrum, there we provide hugs, touch, and affection, so that their emotional needs are met)….

Caregiver perceptions of the caregiver's role in children's social-emotional development

In this theme, some participants perceived that the role of caregivers is very important, because *caregivers* are the ones who provide care and shape the character of children at the Metta, Mama, & Maggha Foundation, as substitutes for parents. In addition, because *caregivers* at the foundation are also health workers, they also play a role in monitoring their growth and development, one of which is their social and emotional development. Some participants perceived that *caregivers* play a role in providing therapy if there are delays in speaking, crawling, or refusing to eat, because these developments are interconnected, be it gross motor development, fine motor development, language, social development, and emotional development. Some *caregivers* also believed that *caregivers* also play a role in providing stimulation and touch such as baby massage. *Caregivers* also provide space for children to express their emotions, when children cry, are happy, or disappointed. Based on the results of interviews with participants, the answers expressed were as follows:

….Kalau menurut saya, peran caregiver di sini sangatlah besar, karena kita lah yang memberikan pengasuhan kepada anak di Yayasan Metta, Mama, & Maggha, sebagai

pengganti orang tua. Kalau pola asuhnya baik, maka bisa berpengaruh baik kepada anaknya. Kalau pola asuhnya tidak baik, maka bisa menimbulkan masalah pada anak. Selain itu karena kita juga tenaga kesehatan, maka kita juga bisa memantau tumbuh kembangnya, salah satunya dari perkembangan sosial emosionalnya. (In my opinion, the role of caregivers is crucial, as we are the ones providing care to the children at the Metta, Mama, & Maggha Foundation, acting as substitute parents. Good parenting practices can have a positive impact on the child. Poor parenting practices can lead to problems for the child. Furthermore, as we are also healthcare professionals, we can also monitor their growth and development, including their social and emotional development)…

…kita yang mengajarkan anak berbicara, kita mengajarkan ia berjalan. Memberikan stimulasi untuk tumbuh kembang. Karena menurut saya kebutuhan emosionalnya juga ada kemampuan bicaranya. Kalau anak tidak bisa mengungkapkan yang ia rasakan, maka akan berpengaruh ke perkembangan emosionalnya juga ya (we teach children to talk, we teach them to walk. We provide stimulation for growth and development. Because I believe their emotional needs also involve the ability to speak. If a child can't express what they're feeling, it will impact their emotional development as well)...

… Selain melakukan stimulasi, peran kami juga memberikan terapi di mana bayi-bayi di sini diberikan terapi jika ada keterlambatan dalam berbicara, merangkak, tidak mau makan, itu ada terapinya sendiri2, karena perkembangan-perkembangan itu saling berkaitan. Baik itu perkembangan motorik kasar, motorik halus, bahasa, sosial, dan emosional. (in addition to stimulation, our role also includes providing therapy. Babies here are given therapy for delays in speaking, crawling, or refusal to eat. These developments are all interconnected, including gross motor skills, fine motor skills, language skills, social skills, and emotional skills…

…. Menurut saya, peran caregiver ini memang sangat penting, karena secara tidak langsung kitalah yang membantu membentuk karakter anak di sana. Anak pun jadi lebih berani, lebih berani tampil, lebih menerima kalau diberikan ucapan (In my opinion, the role of a caregiver is crucial, as we indirectly help shape the character of the child. Children become bolder, more willing to express themselves, and more receptive to feedback)...

… Caregiver juga berperan dalam memberikan stimulasi dan sentuhan seperti pijat bayi. Caregiver juga memberikan ruang kepada anak untuk mengekspresikan emosinya, ketika anak menangis, jangan langsung kita ucapkan "jangan nangis", tetapi kita berikan ruang untuk mengekspresikan apakah dia sedih, senang, ataupun kecewa. Caregiver juga turut mengajarkan mengenai sopan santun, dan berperilaku sehari-hari (Caregivers also play a role in providing stimulation and touch, such as baby

massage. Caregivers also provide space for children to express their emotions. When a child cries, don't immediately say "don't cry," but rather give them space to express whether they're sad, happy, or disappointed. Caregivers also teach them manners and everyday behavior)…

Caregiver perceptions of the definition of *affective touch*

In the results of the FGD discussion, it was found that all participants did not know the definition of affective touch.

… Kami belum tahu ya kalau definisinya (We don't know the definition yet)…

After that, the FGD leader provided information that affective touch is a touch that can stimulate children to not only create a sense of happiness, but also make children feel comfortable and feel appreciated. After learning the definition of affective touch, the FGD leader asked *caregivers' perceptions* about what types of touch provided at the foundation, which constitute affective touch. Most participants said that they had provided baby massage for children aged 0-6 months as affective touch, kangaroo care for children aged 0-3 months, bathing sessions, hugging, playing together, and putting children to bed. Based on the results of interviews with participants, the answers expressed were as follows:

… Menurut saya sentuhan afektif yang kami berikan salah satunya pijat bayi, kemudian ada metode kanguru (I think one of the affective touches that we provide is baby massage, then there is the kangaroo method)….

… Pada saat sesi memandikan juga ada sentuhan di sana (During the bathing session there is also touching there)…..

… Pada saat mengantar tidur juga, biasanya kita membelainya, menenangkan (When we put them to sleep, we usually stroke them, calm them down)…

Caregiver perceptions of the influence of providing baby massage as *affective touch* in children's social-emotional development

The discussion revealed that some participants perceived the effect of infant massage as an affective touch on social-emotional development. After the massage, the child felt calmer and more comfortable, allowing them to perform their daily activities more effectively. Some also perceived that after the massage, the child felt safer, loved, and closer and *bonded* with their *caregiver*, enabling them to better understand instructions or directions and to gain greater self-confidence. Based on the results of interviews with participants, the answers expressed were as follows:

…. Menurut saya, dengan memijat bayi itu, bayinya kan sering disentuh, nah efeknya terhadap aspek emosionalnya itu, bayinya lebih merasa nyaman, bayinya lebih happy, jika ketemu orang baru itu bayinya tidak takut, tidak rewel (In my opinion, by massaging the baby, the baby is often touched, so the effect on the emotional aspect is that the baby feels

more comfortable, the baby is happier, when meeting new people the baby is not afraid, not fussy)…..

…. Menurut saya, salah satu efek pijat bayi misalnya bayinya takut terhadap rumput, lumpur, namun dengan adanya sentuhan pijat, bayinya dapat terbiasa dengan lingkungan tersebut, artinya kepada sensorinya juga jadi terstimulasi. (*In my opinion, one of the effects of baby massage is, for example, if the baby is afraid of grass or mud, but with the touch of massage, the baby can get used to that environment, meaning that his or her senses are also stimulated)...*

…Menurut saya, secara keseluruhan karena anak-anak di sini sering dipijat jadi lebih banyak yang tidak tantrum dibanding yang tantrum. Banyak yang sudah lebih mengerti bila diberi instruksi dan lebih bisa mengomunikasikan perasaannya (I think, overall, because the children here receive frequent massages, there are fewer tantrums than there are tantrums. Many of them understand instructions better and are better able to communicate their feelings)…

…. Menurut saya, anak setelah dipijat itu dia akan merasa lebih tenang, lebih nyaman, sehingga lebih maksimal lagi dalam melakukan aktivitasnya sehari-hari (*In my opinion, after a massage, a child will feel calmer and more comfortable, so they can perform their daily activities to the best of their ability)...*

… Menurut saya, anak setelah dipijat itu dia akan merasa lebih aman, merasa dicintai, dan lebih terjalin bonding nya dengan mama. Lebih dekat dan terjalin ikatannya (I think that after a massage, a child will feel safer, more loved, and more connected to their mother. They'll feel closer and more connected)…

Caregiver perceptions of how important the influence of social-emotional aspects is on children's daily behavior

In the results of the FGD discussion, it was found that some participants had the perception that children who are socially-emotionally healthy in their daily behavior are more understanding and quicker to accept when told and directed, are more confident, and are better able to express their wishes. Based on the results of interviews with participants, the answers expressed were as follows:

….Menurut saya, anak yang sehat secara sosial-emosional itu lebih mengerti dan lebih cepat menerima kalau diberi tahu. Kalau tidak diperbolehkan melakukan sesuatu, dia lebih cepat bisa menerima alasan tidak bolehnya. Lebih penurut lah, lebih fokus juga (In my opinion, a socially and emotionally healthy child is more understanding and quicker to accept when told. If they're not allowed to do something, they're quicker to accept the reason for it. They're more obedient and more focused, too)…

… Iya betul, jadi lebih gampang diarahkan (*Yes, that's right, it's easier to direct)...*

… Kalau menurut saya, anak jadi bisa lebih percaya diri di kehidupannya sehari-

hari, anak juga lebih bisa menyatakan keinginannya dengan lebih baik lagi, misalnya anaknya haus dia bisa menyampaikan "mama, susu". Namun kalau anak yang emosional sosialnya kurang bagus, dia akan marah terlebih dahulu (*In my opinion, children become more confident in their daily lives and are better able to express their needs. For example, if a child is thirsty, they can say, "Mommy, milk." However, if a child lacks emotional and social skills, they might get angry first)...*

***Caregiver* perceptions of the integration of affective touch into childcare patterns**

In the results of the FGD discussion, it was found that all participants had the perception that they strongly agreed and were greatly helped by the touch parenting pattern, because the children at the foundation really need this touch parenting pattern. Based on the results of interviews with participants, the answers expressed were as follows:

…sangat setuju dan sangat terbantu dengan pola asuh sentuhan tersebut, di sini kan banyak bayinya, tidak sama pola asuhnya seperti di rumah. Jadi bayi-bayinya sangat butuh pola asuh sentuhan itu, jadi tidak banyak yang rewel (I totally agree and find the tactile parenting style very helpful. There are a lot of babies here, and the parenting style isn't the same as at home. So, the babies really need that tactile parenting style, so there aren't many fussy ones)…

DISCUSSION

***Caregiver* perceptions of the definition of a socially-emotionally healthy child**

Participants perceived thata socially healthy child as one who could socialize with friends, interact with them, and communicate with caregivers and peers. Meanwhile, some participants perceived an emotionally healthy child as one who could express their emotions, recognize their own feelings, and understand directions from their caregivers. The perspective presented by this participant is in accordance with the previous study that a child who is socially and emotionally healthy is a child who is able to form and maintain positive relationships with other people in his environment, manage and express emotions well according to the situation he is facing, be in the midst of many people, maintain himself with an attitude that is acceptable to the environment in which he is located (15).

***Caregiver* perceptions of children's social-emotional needs**

The perception of the participants is in accordance with the statement regarding social-emotional needs (16). Basic human needs according to Abraham Maslow are: physiological needs, the need for security and protection, social needs, the need for appreciation and feeling valued, and the need for self-actualization. This also applies to children at the Foundation, the forms of needs that fulfill their social and emotional aspects include: 1) the need for a sense of

security (*Safety and security needs*), where children whose need for security is met will tend to be relaxed without excessive anxiety; 2) the need for a sense of love, belonging, and being owned *(Love and Belonging Needs),* which includes giving and receiving affection, a feeling of belonging and belonging, having meaningful relationships with others, such as warmth, friendship, and getting a place or being recognized in their family, group, and social environment (17).

Caregiver perceptions of _the caregiver's role_ in children's social-emotional development

The participants' perceptions are in accordance with the statement regarding basic human needs according to Abraham Maslow, namely: physiological needs, the need for security and protection, social needs, the need for appreciation and feeling valued, and the need for self-actualization. All of these needs can be met even from the smallest environment, namely the touch and interaction of the mother, father, caregiver, and the home environment. Whether a baby is a newborn or has entered toddlerhood, his emotional needs are basically the same: he needs to feel loved and safe. However, as he grows and changes, the way he gives him love and security can also grow and develop (17).

Caregiver perceptions of the definition of _affective touch_

The participants' perceptions stated that parental touch (kangaroo care method) or baby massage on the skin can activate CT afferent fibers as a marker of activation of feelings of reward (18).

Caregiver perceptions of the influence of providing baby massage as _affective touch_ in children's social-emotional development

The participants' perceptions are consistent with the statement that parental touch (kangaroo care method) or infant skin massage for affective touch (CT fiber) Affective touch in particular promotes brain development and cognitive and social behavior through stimulation of growth factors, and the release of oxytocin, opioids, and dopamine as well as epigenetic signaling and modification. These neurochemical systems help mediate developmental changes through neural plasticity and integration of brain circuits that serve sensory processing, child characteristics, reward, and social cognition (18).

Caregiver perceptions of how important the influence of social-emotional aspects is on children's daily behavior

The participants' perceptions are in accordance with the statement that social development is a person's ability to act or behave in interacting with social elements in society in accordance with social demands. Social development is the achievement of maturity in social relationships. Children's social abilities can be obtained from various

opportunities and experiences of interacting with people in their environment. The need to interact with others has been felt since the age of six months, when children are able to recognize their environment. Social behavior is a behavioral action carried out by a person in relationships between individuals or between individuals with themselves that can be seen and observed in everyday life (19).

Caregiver perceptions of the integration of affective touch into childcare patterns

The participants' perceptions are consistent with the statement that children in institutions such as foundations and orphanages often experience a lack of affective touch. This lack of touch often leads to persistent stress. Infants and children in institutions such as foundations and orphanages typically receive little touch from caregivers, which contributes to later cognitive delays and neurodevelopmental delays (20). The cognitive skills of children who experience this deprivation are often below average when compared to children of the same age raised in families. Unfortunately, this deprivation and associated developmental delays appear to persist for years after adoption (21). Children raised in institutions who receive less care and physical touch are also at higher risk of behavioral, emotional, and social problems (22).

CONCLUSION AND RECOMENDATION

According to the caregivers' perceptions at the Metta Mama & Maggha Foundation, the importance of implementing a parenting pattern with the provision of touch in the form of baby massage as *Daily Affective Touch* for children's social-emotional development. Children at the foundation need affection, attention, the need to be loved, the need to feel safe, the need to be understood, the need for positive affirmations, kind words, and praise and the need to interact with their peers. The role of caregivers is very important because it replaces the role of parents. The application of baby massage will have an impact on the child's calm and comfort so that the child is more optimal in carrying out daily activities and bonding with their caregiver is established. It is important to continue this parenting pattern at the Metta Mama & Maggha Foundation because affective touch has a very large impact on the social-emotional development of children at the foundation who tend to lack parental affection.

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