



## HEALTHY TOUCH AND INFANT MASSAGE: TWO MAIN FACTORS IN INFANTS DAILY CARE AND HEALTHY DEVELOPMENT

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### **Abstract:**

Infant massage is a scientifically proven practice that promotes the physical and mental health of the infant. The term infant massage refers to the application of touch to the infant by the parent or caregiver during the first year of life with specific massages. Through the following literature review, the benefits of infant massage for the infant, the family and the wider society are noted and commented on. The benefits of its application to the infant are recorded in four different areas. These refer to the concept of the infant's interaction with the parent/caregiver, stimulation, relief and relaxation respectively, of the premature and full-term infant. As far as parents are concerned, infant massage seems to enhance their own parenting practices, as well as their self-confidence and sense of security, while reducing symptoms of postnatal depression. In addition, through healthy touch and massage, benefits are documented in reliable adaptive changes in the community. These include a reduction in abuse, violence, and crime, as well as a reduction in the expenditure of government health care funds. Research evidence supports that the implementation of infant massage can show a reduction in the cost of spending in Infant Health Units of premature and non-premature infants. Healthy touch and physical contact through massage during infant massage by trained mothers or trained staff when the mother is unavailable can significantly enhance the faster development and psychosomatic health of infants.

**Keywords:** infant massage, healthy touch, parental hug, parents, society, family, basic care

### **1. Introduction**

Last decades, infant massage is practised in most countries and in western culture. It includes elements of Indian and Swedish chiropractic, reflexology and yoga (McClure, 2000). After all, touch therapy was the foundation of medicine before pharmacotherapy,

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with early references in China, India and Egypt. In Greece, Hippocrates in 400 BC mentions "the art of massage" as a therapy, and Asclepiades identifies massage as a naturalistic therapeutic method (Barnett, 2005; Hadjivalsama, 2021).

Modern research emphasizes the significant benefits of maternal hugging and healthy touch with infant massage as essential factors in the basic daily care and healthy physical and mental development of infants. A wealth of research data in recent decades have studied and recorded the statistically significant effect of systematic physical contact between infants and parents, revealing beneficial effects on communication between them, on both physical and socio-emotional health and development of the infant. Healthy touch with infant massage has been listed as a scientifically documented practice that contributes to normal psychosomatic development and enriches communication between parents and infant (Smith et al., 2013); (Gurol & Polat, 2012); (Moyer, et al., 2013). Infant massage is an ancient practice that helps parents/caregivers to connect with their infant, respond lovingly and respectfully to their needs as well as to both acquire non-verbal communication skills, thereby building a healthy emotional relationship (Hadjivalsama, 2021); (Pados & McGlothen-Bell, 2019). It is now scientifically accepted that gentle touch yields oxytocin release. A hormone responsible for the feeling of happiness, which in turn induces a state of calm. In addition, research findings suggest that massage helps in the secretion of growth hormone which determines the body's ability to use the nutrients received by the infant. In addition, it can improve body fat deposition and, in turn, the quality of growth in premature infants (Uvnäs-Moberg, 2011); (Moyer, et al., 2013).

More specifically, parent training in touch practices and massage techniques focuses on the parent becoming the "expert" who is particularly capable of responding to the unique needs of their child (McClure, 2000). Therefore, parents who have attended infant massage classes and focus on daily touch, hugging and healthy touch techniques make a more positive contribution to the daily care and meeting the basic needs of their children. They themselves are able to contribute more actively and more beneficially to the all-around development of infants as well as more actively reinforce safe attachment styles with their children.

The benefits of this type of practice, as discussed later in the text, are observed in infants, in the whole family and in the wider society.

## **2. Benefits for the Infant**

According to the International Association of Infant Massage (IAIM) and McClure, (2005), the benefits for the infant are classified into four categories, interaction, stimulation, relaxation and relief.

### **a. Interaction**

Infant massage contributes to positive interaction and communication between mother and infant during the first year of life. The tactile comfort that accompanies maternal

hugging and holding promotes the health and well-being of the dual parent-infant relationship (Pados & McGlothen-Bell, 2019). Contact with the mother's skin reduces infant crying and increases interaction with each other. Infant massage could therefore be considered the easiest way to establish a sense of touch, which, combined with eye contact, can improve mother-infant bonding and secure attachment (McClure, 2005). After all, the sense of touch is the infant's main tool for perceiving and exploring the environment. Infants during massages express themselves through their body movements, body orientation and muscle tone. By seeing these signs, the mother/caregiver perceives pleasure, relaxation, relief, and possible denial on the part of the infant of her energy. In this way a kind of non-verbal communication is created between the mother/caregiver and the infant, which promotes closeness and interaction between them. As a result, the bond between them is strengthened and a secure type of attachment is established (Gurol & Polat, 2012).

### **b. Stimulation-invigoration**

During the massage, all the infant's senses are stimulated through tactile, skin-to-skin contact, visual communication and olfactory recognition. In addition, the infant is given the opportunity to become aware of his/her own limbs as well as the length of his/her body. All this promotes the improvement of coordination and balance. Through massage, muscle growth, stimulation of the skin and the immune system are achieved. Finally, positive effects on respiratory balance, circulatory system and digestion are noted (Field et al., 2011).

However, infant massage as a key factor in the daily care of the newborn, can help and improve the health of infants who need special attention and care. There is evidence that infant massage has beneficial effects on premature infants who are hospitalized in the NICU. Some of these include shorter length of stay in the incubator, reduced pain, improved and faster weight gain, and generally improved neurodevelopment in premature infants (Pados & McGlothen-Bell, 2019).

Through the massages given by parents during infant massage, babies will quickly become aware of the touch and caress of the mother or father, which they do not have in abundance as they may have to remain in the incubator. Infants will thus begin to interact with their parents earlier than would otherwise be the case ([www.iaim.net](http://www.iaim.net)).

### **c. Relaxation**

Massaging the infant's body calms the central nervous system and the brain produces more serotonin, the pleasure hormone, and less cortisol, the stress hormone. This causes the infant's heartbeat to slow down and their breathing to relax. In addition, massage helps to relax the muscles, thus relieving the infant from intense and stressful situations and enhancing their well-being and mental health (Pados & McGlothen-Bell, 2019); (Smith et al., 2013).

#### **d. Relief**

Massages applied all over the infant's body have the potential to relieve the various sources of pain and discomfort. In the first few months after birth infants experience intense and persistent crying, which is caused by severe pain in the abdomen. This pain is often unexplained by parents and also by the pediatricians themselves who are unable to provide a medical prescription to relieve the pain in the newborns. The colic that causes inconsolable crying in the infant can be treated with massages done during infant massage (Shen., Chen., & Jin, 2013). In addition, with certain massages in the head region, movement and removal of mucus from the nasal system are promoted, thus allowing the infant to breathe freely. Additionally, massages in the area where teething is developing alleviate pain and discomfort resulting from it (McClure, 2000).

### **3. Benefits for the Mother**

The attachment bond is fostered by affection, care, touch and physical contact. As Bowlby states, attachment is the stable relationship, mutual affection and love that develops between the child and the mother/caregiver, but also with other people in the immediate family environment. Infant massage could be considered the easiest way to establish the sense of touch, which combined with eye contact, can improve mother-infant attachment. Infants express themselves through their body movements, body orientation and muscle tone. The mother is positively affected through contact with the infant's skin and gains greater pleasure and desire to have contact with the infant. Their relationship benefits and a healthy and stable foundation is created. The mother-infant closeness through healthy touch and the special massages of infant massage fosters the creation of a secure type of attachment and the development of a caring relationship, filled with tenderness and love (Papadaki-Michailidis, 2006).

Infant massage is a tool in the hands of parents/caregivers, through which they can better understand the infants' needs and understand what they trying to show them in their own way. It is a pleasant and positive experience for the infant, which makes him/her feel safe, helps him/her manage situations, communicate and interact with the parent/caregiver. The mother's recognition of the infant's needs and her response to them promote mutual regulation, communication, security and closeness. The mother feels confident that she can cope with the new demands of her life after her child comes into the world. She increases her confidence in caring for the infant and improves her parenting skills. Lactation and the mother's willingness to breastfeed her infant are also strengthened. In addition, parent education classes give parents the opportunity to come into contact with other parents, socialize, exchange views and get different opinions ([www.iaim.net](http://www.iaim.net)).

The contribution of touch through infant massage is also important to mothers suffering from postpartum depression. Research data has shown that infant massage, and this type of interaction with the infant, can help reduce the levels of depression in the mother. Special studies have shown that mothers who used infant massage had a higher

rate of overcoming depression than those who simply had psychological support. With healthy touch and massage, they make direct contact with their infants, offer them care and love, and familiarize themselves more easily and quickly with this new existence (O'Higgins et al., 2008).

#### **4. Benefits for the Father**

The father, like the mother, is an important person for the infant. Infant massage could be described as a tool in the hands of the father which helps him to establish a real and close relationship with his infant, thus contributing in the best possible way to all stages of the child's development. Many young fathers along with the anxiety of the new, feel fear of their parenting ability. They often compare their role to that of a mother and feel at a disadvantage, believing that they are behind because of their different physiology (bonding through breastfeeding). Another reason that makes young fathers fear that they cannot form the same meaningful relationship with their infant is the fear of not understanding the infant's messages and thus not responding well and meeting the infant's needs (Cheng et al., 2011). A means of combating these concerns, gaining self-confidence and strengthening the parental mechanisms already in place is therefore infant massage. Touch is the most primal human sense which begins before birth and is associated to the largest organ of the human body, the skin. It is the medium that the infant uses at the beginning of his/her life to learn about his/her natural environment and even more so as to develop close relationships (O'Higgins et al., 2008). It is an important way for infants to communicate, through which they give and receive feelings. Fathers who applied chiropractic care on their infants came closer to them thereby strengthening the father-infant dyadic relationship. The application of infant massage helps the father gain a better understanding of the infant and promotes the relationship between them (Cheng et al., 2011).

#### **5. Benefits for Other Family Members**

All members of the extended family can contribute to the care and relaxation of the infant through infant massage and also to the strengthening the relationships with each other. Infant massage increases everyone's willingness to participate, as time is spent pleasantly, creatively and qualitatively. It promotes and increases respect between family members. They respect the needs of each member and strive to meet them. An environment of relaxation and tranquility is cultivated at home and everyone contributes to this, creating the right context for the infant and other children, if any, to grow and develop smoothly, without conflicts and tension. Even the siblings of the family can participate in the infant massage under the supervision of the parents. They thus come into contact with their younger sibling, they become more familiar with his/her arrival and any jealousy between them is reduced. Finally, the quality of sleep in the family improves. If the infant is relaxed by the infant massage, the duration and quality of the

night's sleep is likely to increase, resulting in improved sleep for the whole family ([www.iaim.net](http://www.iaim.net)).

## 6. Benefits for the Wider Society

Infant massage is an early intervention that promotes bonding between parent and infant, resulting in close-knit families and individuals with strong foundations in society. It also increases respect for the different needs of each person. It sensitizes people and this has the effect of reducing violence, crime and conflicts between them. By involving the father in the care of the infant, there will no longer be the stereotype that only the mother is involved in the care of the children and the home. The difficulties of the mother's daily activities are therefore recognized and family tasks can now be shared. The psychological and physical health of members of society is also improved, since infant massage has multiple physical and psychological benefits for individuals and, by extension, for society as well ([www.iaim.net](http://www.iaim.net)). Finally, the general economy is improved, since through the healthy touch with infant massage there is a significant and faster improvement in the physical health of premature babies, resulting in fewer days spent in hospital, so the state spends less money on their care (Hadjivalsama, 2021).

## 7. Conclusion

Research data of the last decades document the statistically significant effect of touch and infant massage techniques on the all-around development of infants. The benefits recorded from infant massage contribute not only to the mental and socio-emotional development of infants through interaction with parents, but also to the stimulation of their systems, such as circulatory, digestive and hormonal. Healthy touch with infant massage offers relief to the infant from physical and mental tension, thereby helping to improve the infant's ability to self-regulate and reduce stress hormones.

Not only babies but also parents benefit from infant massage. They themselves seem to better understand their children's needs and communicate with them in non-verbal ways, thus strengthening the bonds of attachment between them. As a result, they feel more competent and emotionally secure about caring for their infant. The wider family also benefits, as sibling rivalry is reduced, respect between members is developed, and therefore conflict is reduced.

Through the healthy touch of infant massage, the wider society also benefits, as through the nurturing touch the development of respect and empathy is promoted and thus conflicts between its members are reduced. Thus, in the long run, as supported by special studies, society is led to a reduction of crime, an issue that has been plaguing the International Society.

Finally, positive effects are also reported on the general economy of each state, as it has been proven that intervention in premature infants with methods such as hugging and healthy touch with infant massage, has had positive effects in the development and

recovery of hospitalized infants. As demonstrated, infant massage is a safe, simple and cost-effective intervention for parents and premature infants that can be implemented from the period of hospitalization and continued upon the infant's return home, with significant benefits for both infant and the parents.

### **Conflict of Interest Statement**

The author declares no conflicts of interest.

### **About the Author**

Dr. Alexandra Nousia is a graduate of the Department of Preschool Education. Master's degree in Pedagogical Play and Pedagogical Materials in Early Childhood Education. PhD degree in the Department of Early Childhood Education, School of Education Sciences, University of Ioannina, Greece. She is an adjunct lecturer at the Department of Early Years Learning & Care at the University of Ioannina, Greece. Her research interests focus on all-round early education, healthy development and care in early childhood. Her main study subjects are music education, Arts as a whole, play, digital play and the use of ICT, as basic means of education, expression and development in early childhood.

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- International Association of Infant Massage ([www.iaim.net](http://www.iaim.net))



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