

Maternal affective bond scientific findings

María Teresa Sotelo Morales*

President-Fundación En Pantalla Contra la Violencia Infantil, Mexico

*Corresponding author

María Teresa Sotelo Morales, President-Fundación En Pantalla Contra la Violencia Infantil, Mexico, Tel: 55 56899263, E-mail: teresotelo@hotmail.com

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Abstract

Recent neurological, cardiovascular and neonatal studies, among others, have demonstrated the biochemical interaction between mother and fetus from the first moment of conception, maintaining at all times bio-molecular communication, transported through the umbilical cord and placenta, whose functions are not limited to filter nutrients and oxygen, but to capture emotions in the molecules and cells of both bodies. The mother-child connection is much deeper than what was previously known or imagined.

Surprisingly the heart of the nasciturus, can translate the content of the emotions that the mother sends, intuitively the baby knows if it is, or not loved. This data is not surprising, the whole process of gestation occurs in a symbiotic process of molecular and cellular communication, in the middle of an electromagnetic field that the heart of both translates.

Keywords: Maternal Bond, Pregnancy, Gestation, Nasciturus, Heart

Introduction

A divine exchange of symbiotic communication occurs during pregnancy, birth and lactation between the heart of the mother, and the heart of the child. This synchronicity comes to life in the first moment that the woman's body has been fertilized, giving rise to cell development, and immediately to the formation of the 46 chromosomes of the genetic code, which will program and direct the development of the new life. From its first day the embryo and mother are sending signals. How is that dialogue developed?

Rolin McCratey ensures that emotional information is encoded and modulated in the spectral magnetic field of the placenta. The heart is the first organ that forms in the body, and acts as an organizer of other organs during the gestation process [1]. Between 60 and 65 percent of cardiac cells are neuronal cells identical to those found in the brain. The neural cells of the heart perform the same function as those of the brain; they are grouped into ganglia and connected to the neural network of the body by means of axons and dendrites. Starting from this premise, McCratey assures us that by learning to change our emotions, we are changing the information encoded in the magnetic fields radiating through the heart [2]. The first dramatic movement, which symbolizes life itself, is the first heartbeat that occurs around three weeks after conception. The embryo is installed in the continuity of the mother's heartbeat. From the first month of gestation, the heart that is just being formed incorporates the heartbeat of the mother into its own heartbeat.

With each beat, the heart not only pumps the blood, it also transmits neurological, hormonal and electromagnetic information to the brain

and the entire body. Each wave is as unique as your fingerprint. The wave variations in each beat contain data on the different organs and the rhythms of the body [3].

These cascade signals involve the subcortical areas or "limbic" system [system consisting of several brain structures that manage physiological responses to emotional stimuli] the amygdale is a central part of the brain for the formation of emotional memories [4]. Likewise, in her scientific report on mother-child communication in pregnancy, Dr. Natalia Lopez explains that the cells migrate between the mother and the fetus through the placenta, joining different organs. Phenomenon known as fetal microchimerism, or the presence of fetal cells in the maternal body, and are genetically different from the own cells [5]. This process starts from the fourth week of pregnancy and the mother keeps them all her life.

Some cells of the embryo have been found dispersed in the organs of the mother and even in her heart known as cellular progenitors associated with pregnancy [PACP], and are present in maternal blood in a ratio of 2 to 6 cells per milliliter. Due of their fetal origin, PACP cells have a great capacity for self-renewal and collaborate with adult stem cells in the regenerative function of a woman's body.

Dr. Candace Pert in her research work, Molecules of Emotion, points out that all molecules have a vibrational aspect and physiological particle acting in two planes, and explains how the molecules of emotions move through the body and fit into the receivers of the cells just as a key would fit in their lock [6]. When this appears, a mutation occurs in all the cells of the body including the valves of the heart. As well, Dr. J. Lee Nelson, an expert in microchimerism at the Fred Hutchinson Cancer Research Center in Seattle, explains that fetal cells do not just passively circulate. Studies with female

mice show that fetal cells that end in the heart become part of the heart tissue, “They become cells of a beating heart” [7].

The field of the heart of the mother connected to the nasciturus through the umbilical cord generates an energy coupling charged with impassioned information. During his research, Muller showed that the emotional load released during pregnancy can be renewed propositively by inducing gratifying and emotional feelings in the mother through heart palpitations [8]. The nervous system acts as an “antenna”, which is oriented and responds to the electromagnetic fields produced by the heart. Recent discoveries of neurocardiology show how the heart transfers electromagnetic and chemical information to other organs.

When a woman welcomes her pregnant condition, the hypothalamus during the course of gravidity will generate and release the Occitocin hormone, which plays a decisive role in parental behavior. Recognized as the hormone of love, and its role during pregnancy will be to bring about states of joy in the mother. Each time the nasciturus produces a movement in the belly, it will remind that the baby is there and it is part of her. Thus, there is a whole machinery of articulation through the whole body responds to a specific emotion. This network of nervous intercommunicating connects the heart to the brain and the rest of the body, so respectively the heart transmits information to the brain and the body through electromagnetic fields.

The brain of the woman changes, structurally and functionally, in pregnancy, connecting to the entire magnetic field of conditioned data to respond to the signals she receives from the fetus. All these endogenous factors are propitious and unrepeatable to anchor emotions of love and acceptance of the mother for her baby, using the chemical changes in the mother’s organism that become enduring due to the transport of molecular information from the gestant heart to all organs. Affectivity that will prevail over the years [9]. Now it is now known that the absence of early maternal attachment during pregnancy and post pregnancy, gives rise to emotions of rejection of her child, that spring intentionall abortion, irreversible brain damage in the nasciturus, child abuse and death.

Dark emotions, anger, stress and persistent rejection by the gestant will cause brain and biochemical alterations in the nasciturus, due to the constant release of corticoid hormones by the pregnant’s woman organism. Likewise, and no less serious, the maternal bond will not have formed, which will lead to maternal detachment, future abuse and potential filicide.

This phenomenon is fascinating when the expectant is emotionally ready to receive the child with joy and devotedness, nevertheless, rejection and absence of fondness are devastating for the embryo, not only as a result of the impact at the physiological level that can morphologically alter the brain structure of the fetus, due to the release of catecholamine’s or amino hormones from the adrenal glands that cross the placenta, the heartbeat information and because of the emotional and affective impact when it is captured in the cellular memory of the embryo [10].

In regard to this process, science could not explain the affectation in the nasciturus derived of the mother’s emotions. Now there is it evidences that the lack of early maternal bond is the first cause of rejection, of the mother toward her child. Nevertheless, thanks to various molecular, neuronal and cardiovascular studies,

it is nowadays possible to understand the complexity, not the least fascinating, of maternal love and its implications in maternal upbringing [11].

Derived from these findings and neurophysiologic and cardiovascular explanations in the process of intercommunication during pregnancy, it is now feasible to propose a preventive program to a gynecological hospitals for pregnant women, which primary intention is timely detection of nasciturus / babies at risk of rejection, abandoned or mistreated, when in the mother the early affective bond has not been formed, that is to say during the pre and post natal stages. Additionally, there are associated risk factors such as mother mental disorders, poor impulse control, and chaotic living conditions, considering depression as the common one [12]. Initially, the diligence of a clinical form is suggested to search how the mother perceives and metabolizes her pregnancy. Risk cases should be evaluated by a psychiatrist, psychologist or therapist, as well as by a social worker, so that they can explore the social-family background. Medical personnel, such as the paramedic, must be in unison to deal effectively with risk cases. In my personal experience, women who generate violence are particularly elusive and not very empathetic, which is why a deferential treatment is suggested, so as not to take the risk of suspending treatment.

The intrauterine baby’s hearth grows in the middle of an emotional-energetic environment before birth. Nothing of what happens to his mother is unknown to it. Baby recognizes his voice, emotions, and in them, it intuits the significant value of each one of his vibrations, be empathic and cheerful- or rejection and wrath. The feelings are expressed tacitly between the mother and the child [13].

When exploring the channels of communication with intrauterine life in recent years, it is considered relevant to incorporate the mother in the process of her pregnancy, encouraging her to interact with the baby constantly; talk with him, caress his belly, and stimulating her with the ultrasound images, to learn about the progress of baby. This process with the intention of avoiding in the mother a dissociation of the pregnancy that carries the danger of not forming the maternal affective bond. Perinatal clinical programs should be designed to modify the perception and emotions of pregnant women at risk, resulting in adequate cardio-neurological procedures to anchor affective emotions in the mother. It is then necessary to promote a systematic listening symbiosis between the heartbeat of the mother and the heartbeat of the pregnant baby, through a state of placidity and contentment in the mother, invigorating her to listen to the beating of the nasciturus and her own heartbeats. It is recommended to previously explain the phenomenon of molecular intercommunication between her and her son/daughter, with the intention of counterbalance affective emotions in her during gravidity. To achieve this condition in the mother, the therapist must work hard on her emotions. Spiritual counselors (non-religious) offer excellent results to help patient’s process forgiveness and heal adverse emotions [14].

By listening placidly to the heartbeat of the baby, the mother can perceive intuitively through the modulations of the heart rhythm, the emotional state of her baby. Through this interceptive function, the mother can be helped to perceive the heartbeat sounds from a much more intimate level, in order to create empathy. Emilio Ferrer, a professor of psychology at the University of California, has shown that loving someone also causes a lot of changes at the

physiological level, for instance, the couple's heart rate becomes simultaneous as well as breathing.

The Hearth Math Institute, points out in its findings, that by changing the pattern of afferent information generated by the cardiovascular system, it can significantly influence the perception of emotions. Cardiac afferent impulses exert an important influence on central emotional processing. The neuronal activity in the central nucleus of the amygdale is synchronized with the cardiac cycle which is modulated by the input afferent cardiovascular registry. The cardiac afferent input pattern that reaches the brain can inhibit or facilitate cortical function through simple changes in heart rate [15]. These results provide a link between positive and negative emotions. With this finding, we can infer that to measure the cardiac congruity between both mother-baby hearts, the coherence between both hearts can be measured by Cardiac Pulse Variability or VPC. With this procedure, emotions are clearly reflected beat by beat in the heart rate.

“In simple words, this process would be translated as expected, to listen to music, you have the radio, but a connection is required for it to work. Comparatively the apparatus would be the brain with all its information connections. The organism, and the switch to make it work would be the heart of both, one without the other, does not work you have to join the pieces to detonate the melody”.

Additionally, at the induction of this technique, the moment of mothers delivery, is crucial to anchor emotions in the mother. Before proceeding to cut the umbilical cord, the baby should rest on the breast of the mother and ask her to welcome her baby, promising to take care of him and love him. It is believed that these moments are unrepeatable, possibly some baby cells have migrated to the heart of the mother nesting there to awaken in her responsible motherhood.

This work is suggested to be an institutionalized medical procedure for neonatal intensive prevention programs, to risk mother's timely detection of a child's abuse, to submit to them prevention of violence, which covers a follow up program of psychiatry, spiritual counselor, and cardio-neurocognitive treatment, to protect the nasciturs not just of the physical impact of brain injuries, and other medical disorders scientifically recognized, but the future violence living conditions for the baby.

When inferred that the child abuse perpetrated by the mother, originates in the pre and post natal phases, a hopeful cardio-neurocognitive procedure is proposed, based on recent medical discoveries as a method of prevention that works at the root of the problem where the seed of violence is gestated [16].

In order to foster the affective bond between the mother and the baby, Neurolinguistic programming is proposed in this work, due to its effective registration mechanisms according to the functioning of the brain. The proposal, is to use the Neurolinguistic programming “NLP” to advertize in the woman in gestation, the conscious interconnection with the being that is conceiving in her belly through sensory stimuli; see-hear-feel-talk with the child, encouraging an emotional anchor of acceptance and longing to assume charge of the kid.

The set of processes that are proposed are extremely bare, non-invasive because medications are not applied, and the result will bear

fruits of a life. Among the most scientifically proven techniques to create “rapport” between the mother and the baby is the technique “body to body” encouraging the mother and father to use the waistband to transport the child? Today the experts also suggest comforting or just easing the child by placing it along the mother's breast with the intention that by listening to the moms's heartbeat remind it of his placid days in the womb.

A highly emotive ritual is suggested in the delivery room moments after birth. It is suggested to lay the baby on the mother's chest before proceeding to cut the umbilical cord, praising her to welcome her baby with loving words promising protection. This ritual is highly promising due to the mother's hormonal release and for the previously described neuro-biological input. This tactic takes only a few minutes and its positive effect will be positioned forever in the consciousness and cells of the mother, which will prevent rejection and future mistreatment, simply because it has sealed in its molecules the miracle of maternal love. The presented procedures are simple, purposeful and scientifically based to be carried out at the hospital pavilions, whose fundamental premise is to praise the mother for being the divine conduit to give life to a human being independent of her, but who should take care and watch over.

Conclusion

The recent discoveries of molecular biology, and cardiovascular, which reveals the mysterious secret of the filial maternal love, are beyond expectations, nature's gift in most women is indestructible when it is present, now we know that the strength of that love has biological explanations, it was already pointed out the determining role played by both hearts and the synchrony to communicate, as well as how the cells and molecules are impregnated with coded information.

Perinatal and gynecological obstetric hospitals, have focused on the general care of the health conditions of the mother and her future child, however the future living conditions of the infant have been ignored. Although the institutions can argue that such programs are not within their competence, nevertheless, I can point out that the abusive mistreatment perpetrated by the mother, is predictable and preventable from gestation, through a program of identification of at-risk babies and early stimulation for the creation of the affective bond [17,18].

This work presents a methodical approach to a scientific problema from various experts, that in summary lead us to understand the power of maternal love, unappeasable and eternal, anchored in the molecules of women who expect a child with joy and acceptance, also leads us to explore the rejected babies under hidden conditions and unknown circumstances, starting from the pregnancy seeing the possibility of reversing the babies repudiation, when it is opportunely identified and love anchored.

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