

## Pre and Post Natal Bonding to Prevent Child Abuse

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### Abstract

Adverse and hostile emotions experienced by the mother during pregnancy derive in brain damage in the unborn child. These brain alterations are aggressions to a child during the gestational stage. The US National Institutions of Health report that rejection of pregnancy and absence of the maternal affective early bond, when combined with mental disorders in parents, is highly predictive risk factors for child abuse and intentional killing babies before 18 months of life.

Usually hospital intervention programs focus on the baby and mother health conditions; nonetheless, there is no data and assistance whatsoever of the child and his future living conditions, ignoring alarm violence risk factors [1]. Preventing program has not yet been established predicting child abuse potential, taking control of cases before occurs; however, is a promising resolution that has been ignored or received less attention than models which intervene after maltreatment has been confirmed.

This essay concludes that the origin of child abuse by violent mothers occurs during the gestational stage in women emotionally disconnected from their nasciturus under conditions of severe depression and/or anxiety during pregnancy or after childbirth [1]. Nevertheless, with the exclusion of severe psychiatric illnesses, the disturbing emotions derived from the rejection of pregnancy can potentially be reversed through a non-invasive, universal and low-cost hospital procedure.

Medical researchers are consistent that mother timely bonding is determinant to anchor affectionate care of her kid. Harrods Buhner evidences that both mothers and baby hearths produce emotional information which is transferred each other by the umbilical cord, molecularly anchored the meaning of the emotions in both organisms [2].

An obstetric intervention model is suggested to identify neonates at risk as well implementing a bonding cardio-neurocognitive procedure during pre-natal, birth moment and post-natal stages to prevent abuse, abandonment or death.

**Keywords:** Prevent; Abuse; Prenatal; Postnatal; Heart; Bonding

### Introduction

This study represents the conclusion of 20 years of personal experience interviewing and studying the associated risk factors in adult females with a history of child maltreatment. In this systematic review I have relied on diverse medical and criminal academic findings.

Scientific evidence has documented the long-term effects of prenatal and postnatal effects in the brain structure of the unborn child and its functioning throughout life. Neurodevelopmental disorders are brain injuries that are expressed as neuropsychiatric disorders, which may be modified by a number of elements, from hereditary genetic to psychosocial adverse and hostile stress experienced by the mother during pregnancy, birth, neonatal and childhood period [3]. Science has established that the mother at the time of experiencing stress and anxiety, her body produces cortisol and norepinephrine, hormones that cross the placenta and alters the hippocampus located in the media temporal lobe of the limbic system. This hormone causes a brain injury which changes the normal performance of the brain giving place

to neuropsychiatric disorders and future psychopathological behaviours (Cicchetti Walker, 2003).

These brain variations happen to be aggression to an infant in the gestational stage, whose medical and social implications will impact the infant throughout his lifetime. The influence of maternal stress and negative emotions generated by the rejection of their pregnancy condition, not only have a decisive effect on the neurodevelopment of intrauterine baby but future conditions of violence in the baby's life context [4].

It is a fact that pregnancy stage emotional disconnection to nasciturus, linked with other lethal risk factors as a mental illness in the mother, poor impulse control, and low tolerance of frustration, causes intentional death to babies before 18 months of life and child abuse to those that survive. To examine risk women, will have to discover how perceives and metabolizes the gestation process further medical test her mental health. Usually when there is a clear rejection of the pregnancy, come together with a series of danger factors; a familiar, biologic, circumstantial and moral background that combined derived in the construction of destructive thoughts which concludes on the disruptive emotion of her pregnancy as a "tedious disease" that

in nine months ends, then have to deal with a child that tirelessly cries and causes problems”.

Mother as the primary perpetrator of child abuse is a global scenario. According to a US Department of Health in 2012, from all child victim reports 36.6% were abused by their mothers, 18.7% by their father and 19.4% by both parents.

The Commission on Human Rights of the Government of Canada published a statistic that in 60% of the proven cases of child abuse the aggressors were the mothers.

The Federal District Superior Court of Justice of the Mexican government, [2011 to 2014] documented that child homicide whose aggressor was a member’s family, the mother was the perpetrator in 70% of cases, the father was the offender 60%, and both parents took part in the homicide of 46% of the cases TSJDF Source (Figure 1).

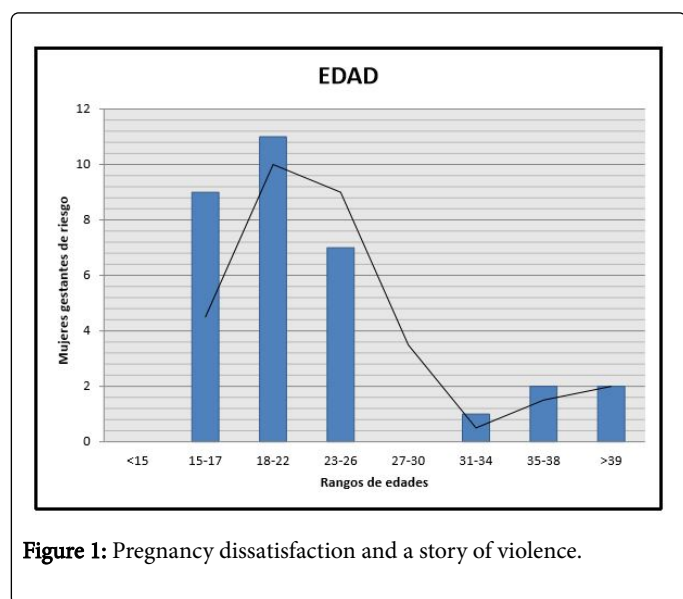


Figure 1: Pregnancy dissatisfaction and a story of violence.

The highest incidence and mortality occurs among the youngest. 78% of the child abused was under three years and 38% under one year. Infants are more vulnerable to intentional cranioencephalic trauma, drowning and suffocation.

There is a non-existing clinical methodology, to identify the unborn child at risk of experiencing rejection and violence during their childhood. Apparently, all programs focus on the strictly medical setting of the mother and her baby; however, there is a lack of information between the birth of the child and its future living conditions.

The Institute of reproductive and developmental biology, Imperial College of London, published in the 2011, the work of the scientist Vivette Glover, implemented in 175 infants whose mothers had lived difficult and stressful situations during the postnatal period, getting a strong link between maternal anxiety after birth and left growing in the hippocampus in children [5].

The US National Medicine Institutes of Child Health points out that violence are a serious public health problem that disproportionately affects infants and toddlers. In the United States in 2008, 772 000 children, 10.3 of every 1000, were alleged victims of abuse or neglect. Rates for children between birth and one year of age were more than twice as high. Its journal JAMA Pediatrics published in 2013,

“Examining Pregnant Women’s Hostile Attributions about Infants as a Predictor of Offspring Maltreatment”. It concerns a prospective longitudinal study made off to diverse, community-based sample of 499 pregnant women finding significant bivariate correlations between mother’s hostile attributions and their mental health problems as a high risk for child abuse, and demonstrate the predictor possibility of timely detecting and preventing abuse [6]. Some disorders of behaviour such as impulsivity, hyperactivity, or deficit attention, have been associated with gestational anxiety. A tracking study in the United Kingdom (Avon longitudinal study of parents and child) has admitted in its analysis the influence of maternal anxiety prenatal development of the kid as a predictor of behavioural problems, appointed stress as a risk component in the future’s healthy life.

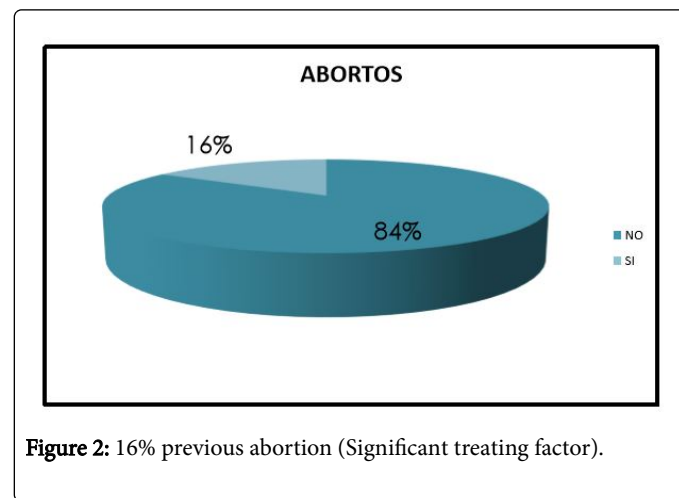


Figure 2: 16% previous abortion (Significant treating factor).

The importance of the development during the foetal period is well established with respect to the association between physical baby vulnerability such as cardiovascular diseases and other metabolic syndromes disorders. The changes related to the stress on the heart rate and the blood pressure of pregnant women, along with chronic anxiety; affect the heartbeat of the foetus, according to a survey published by the Journal of Developmental and Behavioural Pediatrics.

To probe the feasibility to detect nasciturs/baby at risk of abuse, at the head of the Fundación en Pantalla Contra la Violencia Infantil “FUPAVI”, I monitored in the Obstetrics, Gynecology Hospital in Toluca, “IMIEM” [2014] a survey to identify pregnant women that presented risk factors associated with low or non-existence maternal bonding (Figure 2). The total population interviewed was 184 pregnant women age ranged from 15 to 22 years of age (Figure 3).

This scene only shows the feasibility of placing as first step potential cases of infants on perilous condition yet in order to designate the level of danger a medical, social and mental condition evaluation are essential.

### Alarm signals

Dissociation of pregnancy; suspicion of mental insanity; perception of the pregnancy as an illness or willing to end her condition; desire to give child for adoption; fear of obesity and height; poor perinatal control; previous abortions; history of deceased kids (Alarming signal which should be seriously considered); exacerbated symptoms of adverse emotions; discouragement, sadness, fear, anger; have not yet been given a name to the baby in stages of advanced pregnancy, either a physical or mental niche.

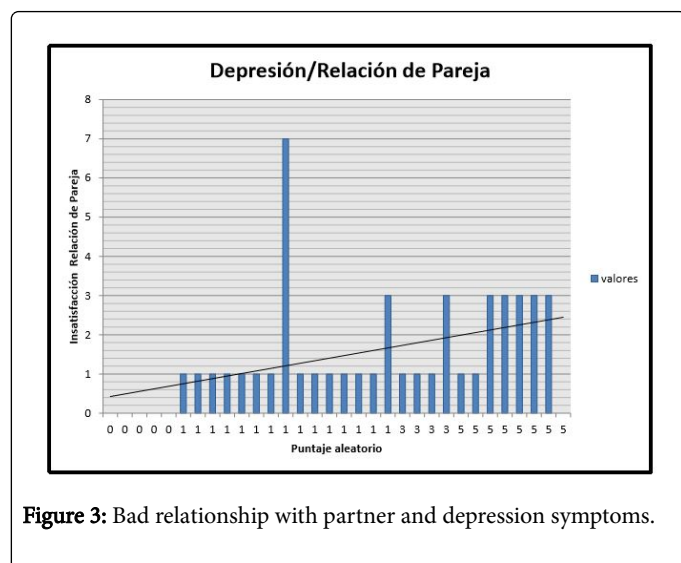


Figure 3: Bad relationship with partner and depression symptoms.

Risk factors in future parents; Nasciturs emotional disconnection; child abuse antecedents; mental disorder, psychopathy or sociopathy; mothers with depression, anxiety, low IQ; non-biological mother or parents; history of deceased children; addictions: Alcoholism, drug dependency; criminal records in parents; unwanted pregnancy; family promiscuity, overcrowding; low tolerance frustration; poor or none impulse control [7] (Figure 4).

Circumstantial factors; Extreme poverty; unemployment, debts; family crisis: divorce, eviction, deaths; chaotic families, other.

To determine risk level of child abuse: Analyse the relationship between each of the variants above described [8]. The hazard value should be set by considering prevalence, incidence, and extent and mortality level of each component by crossing the resulted peril potential factors. Usually the abuse trigger detonator is the combination between mother’s mental disease with a lack of prenatal bond and pregnancy rejection.

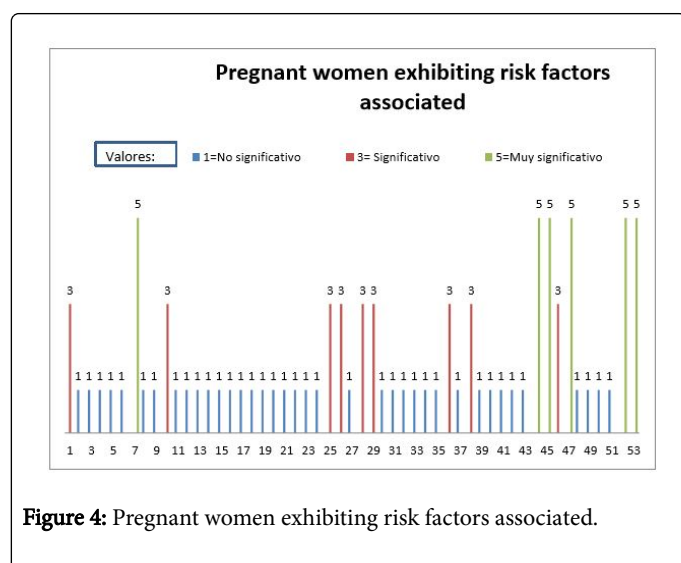


Figure 4: Pregnant women exhibiting risk factors associated.

Positive embryo/fetal growth are just possible by vigorous supporting maternal organism. If the nurturing emotional response is not sufficiently established, the interpersonal bonding lacks its base for

a transitioning healthy relationship [9]. The mother's heart sends disturbing emotions to foetus heart transiting in the placenta throughout the umbilical cord which essential information is printed at molecular level.

### Pre and post natal bonding scientific findings

From the foremost day of life, a molecular dialogue develops between mother and embryo while the uterine tubes respond by producing substances that allow it to grow. The effective bond mother/child has a solid biological basis during pregnancy occurring at the cellular level whose neural centre is in the heart. This organ produces molecular signals translated by both organisms which are immersed in this electromagnetic field. This process of intercom and transfer of information continues after birth and during breastfeeding [10]. The mother's electromagnetic field is full of emotional different patterns of information regarding her pregnancy condition. These feelings full of meaning are absorbed by the baby's heart and decode it in the same way that a radio receiver captures and decodes radio waves patterns. After birth, as a matter of routine, the heart scans for electromagnetic information with which it comes in touch due that pregnancy occurs in the midst of this kind of language.

The heart is the first organ formed during gestation process. Between 60 and 65% of it cells, are nerve cells identical to those found in the brain. Hearth neural cells have the same performance of the brain; they are grouped into nodes and connect with the body neural network through axons and dendrites [11]. The nervous system acts as an "antenna", which is oriented and responding to the magnetic fields data produced by the heart. This transfer information capacity is an innate ability to intensify awareness and mediatized important aspects of true empathy, love and sensitivity. On the contrary full of rejection, anger and anxiety [12]. Direct connections to specific centres of the brain cannot be disabled permanently from the heart establishing a direct flow of information from this organ to the brain by releasing its own neurotransmitters forming an electromagnetic field.

The heart is an organ of perception and cognition, hence relates love or disappointment, which enlightens its real biological function. Stephen Harrod Bühner explains in a comprehensible way in his article "The dialogue process on neurological transfer of emotional information between the mother's heart and the heart of a child, from conception, gestation and lactation", emphasizing that communication ability during pregnancy (and breastfeeding period) can be improved intentionally, producing a deeper level of nonverbal understanding bond between mother and the baby when perceived emotional disconnection [13].

Frank Lloyd, in his research of Neuro radiology of Communication, points out that cardio electromagnetic field is a source of information exchange between people. Heart signals made by one individual can bear upon the brain waves of another”

The HearthMath Institute ensures that the heart is the indicated organ to help transform stress and dissatisfaction for fullness conditions [2]. It points out that the emotional equilibrium is achieved by inducing a state of synchrony between the heart, brain and autonomic nervous system. It suggests incorporating an advanced heart rate monitor to measure even subtle alterations in the heart beats. This type of measurement is known as analysis of the variability of heart rate or HRV. (Analysis of HRV is a standard non-invasively, reflecting interaction heart-brain and the kinetics of the autonomic

nervous system, which is especially sensitive to emotional state changes).

Each EKP in people is as unique as their fingerprint. Each heartbeat waveform variation contains data on different organs and body rhythms.

According to Proust's, during the neurogenesis of remembering, the emotions are closer the heart than from the mind. His thesis advocates that individual variability in the *ADRA2B* gene that codes the 2B adrenal receptor has a significant role in vasoconstriction and blood pressure regulation as well links to brain activation patterns underlying heightened emotional recall.

The pioneering researcher Müller remarks that it is feasible to induce emotions throughout heart palpitations. The Hearth Math Institute also notes that shifting the pattern of afferent information generated by the cardiovascular system can significantly determine the perceptual experience of emotions.

De Martino, scientific survey, “Noradrenergic neuromodulation of human attention for emotional and neutral stimuli”, suggest the Epinephrine for enhancement of human memory encoding. These findings have been detected on electrocardiograms and magneto cardiograms.

The medical and scientific community cannot ignore a medical birth incident in Australia, documented and published by international media June 29, 2013, uploaded in channel YouTube under the title “How One Mother's Loving Embrace Brought Her Newborn Son Back To Life” Ref: [https://www.youtube.com/watch?v=-F2eHA9cG\\_Q](https://www.youtube.com/watch?v=-F2eHA9cG_Q) [14]. The event describes Kate Ogg gave birth prematurely her twins, and one of them was clinically declared dead. The mother requested to hold her baby on her chest to say goodbye whereas caressed spoke into his baby's ear loving words. The father meanwhile retained the babies 'hand. Minutes later, the child began to breathe, opened his eyes and got hold the finger of his father. The Medical team initially considered it was due to reflects on the lifeless body, nevertheless, the baby had come to life. It is a unique story since it had never documented a case similar described as "Miracle".

## Premise

Child abuse is predictable and preventable by timely detect alarm signals in a pregnant woman affected by mental disturbing conditions, pregnancy baby unbound along with chaotic or risk factor living conditions.

Child abuse preventing technique consists to induce in the unbound mother positive emotions by stimulating the cardio-neural pathways during pregnancy, birth moment and lactancy stages.

## Pre and post natal bonding techniques

During pregnancy it is recommendable to record the heartbeat of the baby and make the mother listen to them daily, particularly when she presents anxiety or anger, supported on relaxation techniques [15]. It is also advisable to teach the mother to communicate frequently with the baby by making her participate in the progress of her pregnancy and how she and the baby communicate through the heart.

Ultrasound is a highly auspicious tool to stimulate the senses "see-hear-feel-speak". Brain metabolized data by the reservation of visual sensations, sounds, pictures, beliefs, words, flavours, smells and shapes, which are represented by a circle of strong emotive significance images.

The minutes after delivery are the most propitious and unrepeatable to molecularly anchor emotions of love and happiness in the mother due to the hormonal explosion of oxytocin, progesterone and dopamine, consequently it is recommended before cutting the umbilical cord, not separate the baby from the mother immediately, (cleaning and check-up pediatric procedures can wait a while, except for medical emergencies) a mother welcoming baby love ritual could be implemented requesting the mother to say warm words to her baby while it is laying on her breast “heart to heart together” for several minutes.

Once the baby is born, the medical or paramedical staff could teach her various bonding techniques, like resting the baby often on her breast, either to pamper or to comfort their crying; to transport the child with wrap around blanket or waist bag; during feeding or lactation emphasizes the importance to visually connect with the baby's eyes while expressing loving words, as well is important to teach parents to deal with the crying and adverse situations commonly presented in child abuse. The hospital waiting areas are propitious spaces to broadcast documentaries and spread motherhood value information.

## Conclusion

It is imminent to instrument a hospital prenatal and postnatal violence prevention model to detect pregnant women of risk, incorporating the affective early bond techniques hereby presented. This work sustains that the origin of abuse and homicide in children whose perpetrator is the mother takes place during pregnancy in depressed or mentally insane women emotionally unconnected the nasciturus. It is recurrent an expectant woman with depression and anxiety symptoms unnoticed by the obstetrician. Other severe mental illnesses should be considered as a serious alert condition to create an alert in the family to prevent the infant.

An emptiness of information regarding risk factors future living conditions surrounding the baby is present in obstetric hospitals, ignoring serious warning signals, leaving it unsafe and unprotected to be abused. When low tolerance of frustration along with no impulse control combined with other risk factors such as depression or mental disorders in the mother, the baby's death is highly predictive. Abortion is not the solution, especially when it comes to pregnancy in advanced stages.

Death in infants by brutality occurs in a 73% cases in kids 0 to 3 years of age. The excessive crying of a baby is one of the most frequent causes of the "child shaken syndrome", whose consequences are irreversible brain damage, blindness, epilepsy or death. It is feasible to predict and prevent child abuse, through an averting program to review in each pregnant woman risk factor crossing grade, prevalence and mortality baby's level, stipulating as an obliged compromise to protect the unborn and born baby with a prospective accompaniment program from the gestational stage.

While it is true that many hospital programs emphasize breastfeeding and implement the contact of hearts, these thoughtful measures conducive to emotional stimulation only during the postnatal stage ignoring the importance of gestational time to anchor love and acceptance.

Relevant scientific research, suggest the possibility of intentionally provoke cardio neurocognitive impulses miming the learning process of both organs “heart and brain” as well as their links with other

organs, specifically to anchor cardio-neuronal emotions to permanent level, describing the molecular communication between mother-nasciturs during pregnancy. In colloquial words for the first time science describes the physiological metamorphosis of "motherly love", ancestrally considered as indestructible and eternal, attributing this force a divine power by its inexplicable indestructible effects on mothers.

The execution of the techniques submitted in this essay is based on preventing violence future living conditions that await the unborn child once reached the moment of birth, throughout the stimulation of early mother's baby bonding from prenatal to postnatal phases.

When a baby is born, day and night care endless demands requiring unlimited patience and dedication throughout a lifetime, conditions that only possess a mother who loves her child and wants to protect him/her, irrespective of social class, or the accumulation of stress.

The model basically suggests as relevant the "hearth to hearth" bonding procedures, which are non-invasive, do not require medication, do not present risks, with the particularity that its application could be universal.

The Medical community can take the scientific evidence offered in this work, implementing the preventing procedures and track cases, indicating imponderables and exceptions throughout an exchange of experiences in the medical community. Either wait many more years until there is a precise multi record of cases examined, regardless of we would bear to contemplate in choosing this final option will occur countless deaths in infants and irreversible damage in adults that were abused. The medical community can take the scientific evidence offered in this work, implementing the preventing procedures and track cases, indicating imponderables and exceptions throughout an exchange of experiences in the medical community. Either wait many more years until there is a precise multi record of cases examined, notwithstanding we would bear to contemplate in choosing this final option will occur countless deaths in infants and irreversible damage in adults that were abused.

Physical and mental sequels such as brain damage, neuropsychiatric problems, adolescent and unwanted pregnancies. In addition to civil and legal care costs; child welfare programs, family care programs, children living in the streets, institution shelters for temporary and emergency housing, application of the law, creation and expansion of prisons, delinquency and criminality acts and, so on.

This work is a call to professional ethics to preserve from violence with a new philosophy in the medical practice by an exchange of

hospital cases shared within scientific specialists, considering during its implementation, methodological adjustments and improvement in scientific techniques.

## References

1. McCraty R (2015) Heart-Brain Neurodynamics: The Making of Emotions. HeartMath Institute, California.
2. Buhner H (2003) The Emotional Hearth. The Publisher Bear & Co.
3. McCraty R, Childre D (2002) The appreciative heart: The Psychophysiology of positive emotions and optimal functioning. HeartMath Research Center, Institute of HeartMath.
4. Shonkoff JP, Garner AS, Siegel BS, Dobbins MI, Earls MF, et al. (2012) The Lifelong Effects of Early Childhood Adversity and Toxic Stress. *Pediatr*.
5. Glover V (2011) The Effects of Prenatal Stress on Child Behavioral and Cognitive Outcomes Start at the Beginning. Institute of Reproductive and Developmental Biology, Imperial College London, UK.
6. Cannon M, Huttunen MO, Tanskanen AJ, Arseneault L, Jones PB, et al. (2002). Perinatal and childhood risk factors for later criminality and violence in schizophrenia Longitudinal, population-based study. *Br J Psychiatry* 180: 496-501.
7. De Martino B, Strange BA, Dolan RJ (2008) Noradrenergic neuromodulation of human attention for emotional and neutral stimuli. *Psychopharmacology* 197: 127-136.
8. Cahill L, Alkire MT (2003) Epinephrine enhancement of human memory consolidation: Interaction with arousal at encoding. *Neurobiol Learn Mem* 79: 194-198.
9. McCraty (2004) The Appreciative Heart: The Psychophysiology of Positive Emotions and Optimal Functioning. *Eur J Endocrinol* 15: U119-23.
10. Golding J, ALSPAC Study Team (2004) The Avon Longitudinal Study of Parents and Children (ALSPAC)-study design and collaborative opportunities. *Eur J Endocrinol* 151: U119-23.
11. Oberlander TF, Weinberg J, Papsdorf M, Grunau R, Misri S (2008) Prenatal exposure to maternal depression, neonatal methylation of human glucocorticoid receptor gene (NR3C1) and infant cortisol stress responses. *J Epigenetics*.
12. Jakel B (2008) Prenatal Roots of Attachment in Psychotherapy. *Prenat Perinat Psychol and Med* 20: 148-166.
13. Chalmers B, Mangiaterra V, Porter R (2001) WHO principles of perinatal care: The Essential Antenatal, Perinatal and Postpartum Care. *Birth* 28: 202-207.
14. The embrace of a mother brings life mother's baby.
15. [www.fundacionenpantalla.org](http://www.fundacionenpantalla.org)