# Parenting During Pregnancy: The Infant as the Vehicle for Intervention in High Risk Pregnancy

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## Abstract

This paper will discuss a program within a perinatal center for parents who are confronted with high risk pregnancies. The program includes a clinical nurse specialist providing antenatal testing and a parentinfant specialist with a background in infant mental health providing education and psychological support. The framework of their intervention is based on the belief that the unborn baby's growth and development drives the developmental process of the parenting role prenatally.

Pregnancy is the beginning stage of a lifelong process. It is a time of transition, and a time when most people are open to intervention. Application of Gesell's theory to the prenatal period helps parents explore, on a more conscious level, the challenges of pregnancy as preparatory tasks in taking on the parenting role. Parents can begin to understand parenting as a commitment to nurturing the growth and development of another person – a learned process – and be reassured they will grow and learn with the baby. The excitement of watching growth and development of the unborn child as well as the newborn baby will nurture the growth and development of who they are as family.

Research needs to be done in order to further merge prenatal psychology with medical interventions of pregnancy and the infant mental health needs during the postpartum period. This will assist professionals of all disciplines to better understand how to support families on this powerful journey into parenting.

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#### Zusammenfassung

Diese Arbeit beschreibt ein Programm in einem Zentrum für Perinatologie für Eltern mit Risikoschwangerschaften. Beteiligt sind spezifisch ausgebildete Schwestern für die körperliche und psychische Entwicklung, die Information und psychologische Unterstützung geben. Der Bezugsrahmen ist dabei die Vorstellung, daß das Wachstum und die Entwicklung des Babys den Entwicklungsprozeß in der Elternrolle befördert.

Schwangerschaft ist der Beginn eines lebenslangen Prozesses. Es ist eine Zeit des Überganges, wo die Menschen besonders offen sind. Die Anwendung von Gesells Theorie auf die vorgeburtliche Zeit hilft den Eltern, auf einem bewußteren Niveau die Schwangerschaft als Vorbereitung auf die Übernahme der Elternrolle zu sehen. Die Eltern beginnen die Elternrolle als Engagement zur Unterstützung der Entwicklung einer anderen Person zu verstehen. Dies ist ein Lernprozeß, der sich mit der Entwicklung des Babys fortsetzt. Die Faszination, die davon ausgeht, das Wachstum und die Entwicklung des Kindes vor der Geburt und nach der Geburt zu beobachten, stärkt die Reifeentwicklung der Eltern.

Forschung ist nötig, um die Verbindung zwischen pränataler Psychologie und medizinischer Interventionen in der Schwangerschaft und nach der Geburt zu verbessern. Daher ist die Beteiligung aller Professionellen um die Geburt notwendig, um die Familien auf der abenteuerlichen Reise zur Elternschaft zu unterstützen.

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This paper will discuss a program within a perinatal center for parents who are confronted with high risk pregnancies. The program includes a clinical nurse specialist providing antenatal testing and a parent-infant specialist with a background in infant mental health providing education and psychological support. The framework of their intervention is based on the belief that the unborn baby's growth and development drives the developmental process of the parenting role prenatally.

When a pregnancy becomes "high risk" the psychological implications become magnified for families. Pregnancy history (i.e. infertility issues, losses during any trimester or neonatal concern) changes the framework. The potential loss or harm to the baby colors every aspect of the pregnancy, physically and psychologically. Grief work can be observed as parents grieve the loss of a normal pregnancy, the loss of a healthy baby or the loss of a child that might have beeen. Parents do lose control and the baby does take over via the high technological medical interventions that allows the baby to tell us what is going on. It takes time to learn how to adapt to and interact with the information of the high risk status.

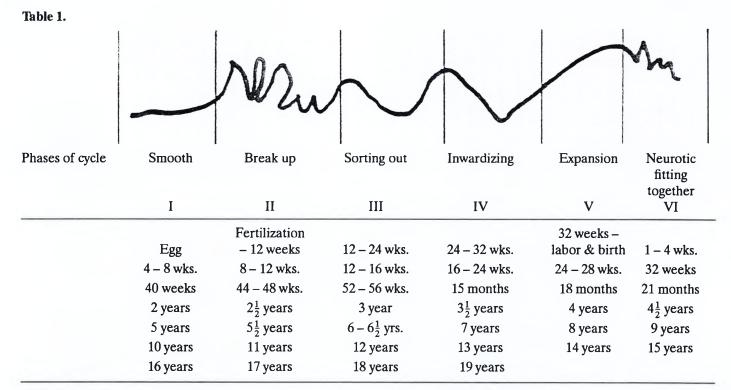
Pregnancy is the first stage in the parenting role. Psychoanalytic writers were the first to recognize the complexity of the psychological tasks of pregnancy and motherhood.<sup>1,2,3</sup> A major psychological impact of this first stage involves the reawakening of unconscious, preverbal issues stemming from a parent's own experience of infancy and toddlerhood. It is a time when people begin to think about how they were parented and perhaps how they may want to parent the child they are about to have.

The work of Arnold Gesell<sup>6</sup> has been adapted to the parental period as a framework for intervention. Just as the baby's postpartum behavior impacts parenting, so do the baby's movements in utero impact maternal attachment<sup>9</sup>. Gesell's framework helps parents "tune in to" the reciprocal relationship they are already establishing with their baby. He suggests there are six stages of neurological development that humans move through reflecting periods of equilibrum and disequilibrum (see Table 1). Equilibrum is a time of balance and stability-while disequilibrum is a time of tremendous growth as the baby changes, moving on to a higher level of sophistication and development. These stages are cyclical throughout a lifetime and reflect our enjoyment of parenting based on where the child is developmentally. In times of equilibrum parenting is usually easier and during disequilibrum parenting is more difficult due to the physiological and pyschological changes of the child.

These neurological stages of development, as all development we see in the newborn, begin long before birth since intrauterine life and early infancy form a continuum. Beginning with conception, an infant's development proceeds stage by stage in orderly sequence, each stage representing a degree or level of maturity. According to Gesell, characteristic movements prenatally are patterns of behaviour. This behaviour pattering of the baby in utero is part of the process of mental growth. The behavioral end-product of the total developmental process is a consequence of continuing reciprocal interaction between the genetic endowment and environment<sup>6</sup>.

The "smooth stage" begins right before conception for the uterus has to be "just right" for parents to conceive (In looking at couples with infertility problems, one hears their struggle for the "right" time for success). At conception the baby moves into "break-up" as the egg and sperm unite, the "break-up" of the cells begin to form new life and the blastocyte seeks to attach. The "break-up" of this forming fetus lasts through the 12th–14th weeks of pregnancy culminating in the fetus (hereafter female baby). At this stage of gestation the baby has formed all of her parts and is flexing and extending her arms and legs<sup>7</sup>.

As the baby begins in the break-up stage so too do the parents. There is a "break-up" in who they are in that they are no longer just two people, but have begun to form a third person. Women experience intense "break-up" in their bodies as they begin to change physically. This "break-up" in the mother can consist of morning sickness, fullness in the breast and tiredness. These are outward signs of the parallel the mother is experiencing along with the baby's developmental changes. The father usually senses "break-up" as he either supports the mother or becomes overwhelmed with the realization of how this experience will impact his life. Thus the emotional upheaval of the parents is driven by the intrauterine growth of the baby's cycle of development.



Gesell's neurological stages of development. Prenatal adaption by Joann M. O'Leary. © 1986

Phase		Behavior	Approach to problem solving
Ā	Smooth	Relativ calm, meet demands to satisfaction Consolidated Mesh with environment	Meet problems with confidence as though they have all answers they need. See relatively few inconsistencies Problem & solution, falling in place Probability more discernible
В	Break-up	Oppositional At odds with self & environment Boiling and bubbling Ritualistic	Dawning of awareness of inconsistencies; tend to hold onto past patterns which previously gave results, but are not satisfied with them
С	Sorting out	Temporary quieting Different tasks, places & situations have different related behaviors. Associate result with a specific problem or task; in balance, establish relationships	Discovery and exploration of new ways of approval Specific patterns for specific problem
D	Inwardizing	Want stability, order and little change Fearful of the unexpected Depends on what children can control fit world within selves	Inductive process, logical Resolve by restriction Work from parts to get whole Attempt to deal with as if no change
E	Expansion	Constant motion and noise vigorous Move with abandonment; so lost in filling newly discovered space children lose selves. Movement and change key to direction	Deductive process. Want to deal with the whole so they will know what the parts are. Want movement and change; do not like status quo
F	"Neurotic" fitting together	Intricate meshing of forces Separate fact from fantasy "Bothered" age because children have a glimmer of what's possible, but cannot always achieve	See problem and many alternatives Can't be sure which possibility more probable. Some notion of what the end should be

The "sorting out" stage occurs as the baby (still referred to by most as fetus) continues to form and move about in the uterus. This progresses through the 24th to 26th week of pregnancy. By twenty weeks the baby hears in the uterus and is beginning to become familiar with the sounds of her environment<sup>4</sup>. The baby begins to practice all the movements that will be present as a newborn. On ultrasound examination one can see babies sucking their fingers, kicking back and forth, rolling about and touching the lining of the uterus.

The parents feel movement in this "sorting out" stage and the reality of pregnancy is undeniable. Parents may begin to explore how they will "sort out" their lives in preparation for this baby. They may seek out others who are pregnant or who are new parents. Both men and women begin "sorting out" their lives financially. Women who will be leaving the work force for a period of time may find their husbands looking for new jobs in anticipation of increased financial responsibilities. Along with this added financial pressure, some men also worry about their changing role, becoming father. Women "sort out" how they will manage work, pregnancy and the parenting experience as well as such practical matters as "sorting out" their clothes as their bodies change and clothes no longer fit. This is also a time when couples may look for new places to live, begin household remodelling or decorating rooms for their new babies.

Inwardizing occurs somewhere between 26–34 weeks. During the "inwardizing phase", the developing baby settles into a mutual reciprocal system with the mother's body. This is usually a time of peace and well-being in pregnancy. Parents begin to investigate prenatal classes and may withdraw more into themselves ("inwardize" their lives). During these weeks parents begin more active preparation for the baby by arranging the house and taking care of work obligations. They seem to choose carefully who they want around them, narrowing the focus of their lives. As the woman's body slows down because of the growing baby, her life begins to "inwardize" more, too. Towards the end of this period the baby "inwardizes" as it moves closer to maturity. The baby leaves her more extended position, flexing into what we call the fetal position, settling into the pelvic area in anticipation of the final journey.

The anticipation and preparation phase is truly an "expansion" stage as the baby begins to be more active – stretching and expanding her body and helping the uterus to prepare for the upcoming birth. In the last weeks of pregnancy, the uterus begins to contract more, softening the cervix to prepare for the baby's journey of expansion through the birth canal.

Antepartum testing is part of high risk pregnancy care driven by the baby and usually begins at about 30 weeks gestation. Each test of the baby predicts safekeeping for the baby in the uterus until the baby's signs indcate it is time to elevaluate for delivery. Appropriate medical interventions will then be undertaken. Approaching testing as an opportunity for the baby to "tell us" what is going on gives the parents reassurance that the baby is participating in an interactive process. "Expansion" (or maturation) of the baby's central nervous system – which controls heart rate accelerations that occur with body movement in healthy babies – is the foundation for the Reactive Non-Stress Test (NST)<sup>5</sup>. The more recently developed Biophysical Profile (BPP)<sup>8</sup> examines a broader range of biological and physiological parameters but essentially does the same thing, i.e., predicts safekeeping of the baby one week at a time. If the test is not perfect, it will be repeated sooner or early delivery may be considered for the baby's safety.

At the initial testing visit, mothers are asked to intuitively relate what they know about their babies. This is done by a simple request: "Tell me about your baby." The information they share is very important for teaching parents to understand at the outset that they know their baby better than anyone else. This encourages mothers to continue paying attention to their baby throughout the pregnancy. We tell parents we do not expect a problem to be discovered by the testing, but the test is given to reassure them that their baby is safe in the uterus or needs to be delivered. After the parents understand and accept the way testing works, the test is done; and it usually confirms the mother's description of her baby. The mother may then be asked to keep a daily activity record. If she becomes uncomfortable with the baby's behavior at any given time, she can call for help.

Parents are relieved to learn that since the mid-1970s, because of testing, proportionately fewer babies die in utero among high risk pregnancies than among normal pregnancies. When parents understand the full implications of testing they can look forward to the reassurance the baby gives them.

The parents in this "expansion" stage are experiencing the nesting urge to finalize the home for the expanded role they will have as parents. Once labor begins, the cervix stretches and expands. With the help of contractions the baby pushes and extends herself out through the birth canal and thus the final stage in the expansion cycle is completed. This birth opens and expands the lives of the parents to areas totally unknown.

As the infant, born with amazing capabilities, readjusts from intrauterine life, so are the parents in a readjusting "neurotic fitting together" period. This readjustment period speaks to the infant's ability to show us where she has been and her capacities to build on the strengths she practiced in the uterus to now adjust in this new environment. The parents, too, must readjust from the state of pregnancy to the actual reality of a baby who will interact with them face-toface. The individuality of the baby, only felt before, has now become a force to be reckoned with hour, day by day. The baby's temperament, personality, and preferences will all interact with the parents to continue laying the foundation of a relationship that is lifelong.

It cannot be overemphasized the importance of understanding that the baby plays an equal role in the interaction. The literature is clear babies come into the world ready to interact but cannot move through stages of development unless there is a significant adult in their lives to help them. This is also true for prenatal development. Initiation of communication on prenatal parenting by the health care providers can be done by noticing the baby's movements, talking about the baby's activity patterns and discussing names, hopes and aspirations for the baby. More explicit focus on the baby's growth and development, movement, personality and play may, over time, prompt additional clues to developing parenting behaviors or give you clues if attachment isn't going well. Exploring recognition of the tasks of parenting behaviors such as increasing nutritional and fluid needs, sometimes restricted activity needs, regular prenatal visits and traditional routine or special care needs for the mother can be discussed as providing a safe environment for the growing baby.

Pregnancy is the beginning stage of a lifelong process. It is a time of transition, and a time when most people are open to intervention.<sup>10</sup> Application of Gesell's theory to the prenatal period helps parents explore, on a more conscious level, the challenges of pregnancy as preparatory tasks in taking on the parenting role. Parents can begin to understand parenting as a commitment to nurturing the growth and development of another person – a learned process – and be reassured they will grow and learn with the baby. The excitement of watching growth and development of the unborn child as well as the newborn baby will nurture the growth and development of who they are as family.

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