

Watching Our Words

Susan Highsmith

Abstract: The majority of practitioners in the field of pre and perinatal psychology would likely agree that in order for society to change prevalent negative beliefs about pregnancy and childbirth there needs to be a paradigm shift in the use of negative language as it refers to pregnancy and childbirth. This article proposes that watching our words can raise awareness of how the language we choose perpetuates society's paradigms or empowers women to give birth more naturally and babies to be welcomed more gently.

Keywords: prenatal and perinatal psychology, language, social paradigms

Michel Odent (2016), expounding on *Midwifery Tomorrow* in the summer issue of *Midwifery Today* states, "Until now, the basis of our cultural conditioning is that a woman lacks the power to give birth without some kind of cultural interference. This is illustrated by a disempowering vocabulary focusing on the active role of a person other than mother and baby—the two obligatory actors in the process of parturition. The keywords are helping, guiding, controlling, supporting, coaching (natural childbirth groups), labor management (medical circles), etc." (p. 16).

There are other commonplace expressions in our vocabularies that disempower women—words which women use themselves as they contemplate giving birth. This article explores the impact of the words we use regarding pregnancy and childbirth.

Background

We in the field of Prenatal and Perinatal Psychology have been calling for a paradigm shift in the realms of pregnancy, childbirth, and parenting

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36 for decades (Chamberlain, 1999; Odent, 2014; Verny & Weintraub, 2002).
37 Nonetheless, the infant mortality rate (IMR; number of deaths per 1,000
38 live births) in the U.S. remains higher than other industrialized countries
39 (MacDorman, Mathews, Mohangoo, & Zeitlin, 2014); the maternal
40 mortality rate (MMR; number of deaths per 10,000 live births) in the U.S.
41 is the highest among developed countries (Agrawal, 2015); the rate of
42 births occurring in hospitals remains over 98 percent (MacDorman,
43 Mathews, & Declercq, 2014); the Cesarean section rate accounts for one
44 third of all births (Hamilton, Martin, Osterman, Curtin, & Mathews,
45 2015); and interventions, both pharmaceutical and instrumental
46 (Osterman, J. K., & Martin, J. A., 2011), are utilized with impunity. Drugs
47 and surgery, the methods of a one-hundred-year old medical paradigm
48 (Dossey, 1999), are still being applied while infant and maternal deaths
49 occur more frequently in the United States than they do elsewhere in the
50 industrialized world. There may be extenuating factors, such as the ability
51 to sustain and prolong high risk pregnancies and the average maternal
52 age in different countries.

53 Considering infant mortality, “an important indicator of the health of
54 a nation” (MacDorman, Hooyert, & Mathews, 2013), the infant mortality
55 rate actually declined from 6.91 to 6.05 per thousand live births between
56 2005 and 2011. However, in 2014 *The Washington Post* labeled the United
57 States’ IMR “a national embarrassment” (Ingraham, 2014). According to
58 *The World Fact Book* (2016-17) a Central Intelligence Agency report which
59 estimated the IMR for 224 countries for 2015, the United States ranked,
60 in descending order, 167th, yet still worse than 57 other countries. The
61 United States falls behind Canada, Australia, Japan, Norway,
62 Netherlands, Germany, France, Sweden and all other developed and
63 wealthy nations. *NBC News* reporter Maggie Fox (2015) stated, “the U. S.
64 infant mortality rate has stalled,” in spite of the declines noted three years
65 earlier.

66 The maternal mortality rate (MMR) “reflects the ability of women to
67 secure maternal and other health care services” (National Women’s Law
68 Center, 2010) The Center for Disease Control and Prevention (CDC, 2015)
69 reports, since the Pregnancy Mortality Surveillance System was
70 implemented, the number of reported pregnancy-related deaths in the
71 United States steadily increased from 7.2 deaths per 100,000 live births
72 in 1987 to a high of 17.8 deaths per 100,000 live births in 2009 and 2011.
73 (www.cdc.com).

74 Robeznieks (2015), writing for *Modern Healthcare*, declares “U. S.
75 women are more likely to die during childbirth than women in any other
76 developed country, leading the U. S. to be ranked 33rd among 179 countries
77 on the health and well-being of women and children.”

120 pervasive influences childbirth is typically viewed by young women as a
121 painful and frightening event requiring medical attention” (p. 256). It can
122 be challenging to change those typical beliefs; they have been instilled
123 over a lifetime and are continually reinforced by modern media. Yet, a
124 paradigm shift in the realm of childbearing will require that women
125 change their beliefs if they are to be truly empowered to realize their
126 potential as the bearers of life. As PPN psychologists we can lead the way
127 by paying attention to the language we use when speaking about
128 childbirth.

129 What appears to be taken for granted by childbearing women
130 themselves, as well those who serve them, are the very words used to talk
131 about childbirth. We have developed a language of childbirth that
132 encompasses our beliefs to a degree that it is very difficult for a woman to
133 question her doctor or even report to her friends that she is considering
134 giving birth at home or in a birth center as this declaration frequently
135 invites criticism (Highsmith, 2014). Virtually hidden in our everyday
136 speech are telltale signs of a paradigm so deeply instilled that it defies
137 change.

138 In the forward to *Childbirth and Authoritative Knowledge* (Rapp,
139 1997), Rayna Rapp credits Brigitte Jordan with coining the term
140 *authoritative knowledge* which describes “how medical authority is
141 socially constructed and maintained” (p. xi). Rapp states “authoritative
142 knowledge isn’t produced simply by access to complex technology, or an
143 abstract will to hierarchy. It is a way of organizing power relations in a
144 room that makes them seem literally unthinkable in any other way” (p.
145 xii). Those power relations are reinforced and perpetuated by the
146 childbirth language we use.

147 Words are the expressions of thoughts. Thoughts arise from beliefs. A
148 belief “is a state of mind in which a person thinks something to be the
149 case, with or without there being empirical evidence to prove that
150 something is the case with factual certainty” (www.wikipedia.org).
151 Synonyms for beliefs are attitudes, feelings, opinions, viewpoints, and
152 perceptions. Simply because we use words to reflect our beliefs does not
153 make those words or beliefs true. Nonetheless, thoughts are linked from
154 the cortex, the thinking brain, to the limbic system, the emotional brain,
155 and “each time these networks fire, it becomes easier for the circuits to be
156 reactivated. That’s how habits are formed” (Restak, 1991, p. 159). Our
157 society has developed the habit of thinking and speaking about birth as a
158 medical event, and, as Uzelac pointed out, one that is painful and
159 frightening.

160 Cellular biologist Bruce Lipton expounds on beliefs in his book *The*
161 *Biology of Belief* (2005). Dr. Lipton goes into great detail to inform readers

162 about how beliefs arise. He explains that children “download the
163 incredible volume of information they need to thrive in their environment”
164 (p. 163). Indeed, they take in whatever they need to survive—to cope with
165 the situations in which they are being raised. Children make sense out of
166 their circumstances and normalize whatever they experience, believing
167 that this (their situation) is the way life is.

168 Perhaps you can recall a moment when you discovered that not all
169 families were like yours. One of my moments of revelation occurred at age
170 eight when I visited the home of two friends whose parents sat at the
171 kitchen table with neighborhood children and played games all afternoon.
172 Really? Parents play games with their children? I had no idea! That didn’t
173 happen in my family. Parents were authority figures and children were to
174 be seen and not heard. That belief is not unusual as it predominates in
175 our culture. It is foremost among the beliefs women have internalized,
176 contributing to low self-esteem and inhibiting their abilities to express
177 themselves.

178 This cultural conditioning begins while children’s brains are
179 developing. Children operate from the deeper and more primitive parts of
180 their neuroanatomy, exhibiting first delta frequencies, then theta,
181 followed by alpha and beta waves. These frequencies can be determined
182 using neurofeedback technology (Laibow, 1999). This increase in faster
183 brain wave states is a normal progression as the brain matures, as
184 millions of connections between neurons develop, as myelinated pathways
185 (those habitually traveled by our thoughts) are established and unused
186 neurons are pruned away. The hemispheres of the cerebral cortex need to
187 mature over time to perform the cognitive functions that adults can
188 demonstrate.

189 At the slower brain wave states of delta and theta, those that
190 predominate in utero and prevail until age six, children are in what Lipton
191 (2005) calls a hypnogogic state. They are open and receptive just as a
192 person under hypnosis would be. That means that children are taking in
193 information, but they are not able to filter it, to determine if the ideas are
194 true or not—perhaps more accurately, to determine if new information
195 agrees with the mindset being established within their brains/minds.
196 Parents have an extraordinary responsibility during these early years
197 because children view them as the experts and believe what their in-house
198 authority figures tell them. Parents are literally teaching their children
199 what to think and feel. This is how prejudices are passed from one
200 generation to the next. This is how beliefs arise—true or not.

201 It is relevant here to distinguish between brain and mind. Professor
202 of psychiatry at the UCLA School of Medicine professor, Daniel Siegel
203 (1999) proposed in his first book *The Developing Mind*, “the mind emerges

204 from the activity of the brain, whose structure and function are directly
205 shaped by interpersonal experience” (p. 1). Siegel (2010) later expanded
206 this definition: “The human mind is a relational and embodied process
207 that regulates the flow of energy and information” (p. 52). Therefore, the
208 brain and mind are not the same. The brain is physical tissue while the
209 mind is process.

210 Conditioning of the brain and mind begins in utero. Just to focus on
211 the emergence of language among the exquisite complexity of fetal
212 development, babies “remember sounds and vowels that they heard in the
213 womb” (Newberg & Waldman, 2013, p. 6). Studies have shown that babies
214 recognize songs and stories they heard in the womb (DeCasper & Fifer,
215 1980; Fridman, 2000; Hepper, 1991; Hepper & Shahidullah, 1994). Verny
216 and Weintraub (2002) note that research supports the connection between
217 the structure of the brain and language heard in utero. Babies exhibit
218 their preferences in demonstrable ways to reveal that they recognize and
219 have already made meaning from what they have been exposed to while
220 gestating. The family in which a baby is raised reinforces patterns already
221 laid down during fetal development, as psychologist David Chamberlain
222 (1988) proclaimed in the title of his first book, *Babies Remember Birth—*
223 *and lots more.*

224 So a pregnant woman could recall, perhaps implicitly, if not explicitly,
225 what her birth was like, what she heard and felt while she was developing
226 in her mother’s womb, and what she learned about birth throughout her
227 lifespan. She would carry implicit memories of any fears experienced
228 during her own birth to the birth of her child. She would have in her
229 memory bank all of the stories, words, images, and advice she had ever
230 heard regarding what giving birth would be like. And do not ignore the
231 impressions instilled by the media, which often portray birth as an
232 agonizing, life-threatening event.

233 Often overlooked is the fear a baby might be experiencing during
234 birth. Physician Robert Scaer (2001) describes the “threat facing the
235 newborn infant” (p. 152) in modern hospitals.

236 Infants born in the hospital face a cold, brilliantly bright, noisy
237 environment associated with fetal monitoring, probes inserted in their
238 scalp, metal forceps on their heads, the jabs of lancets in their heels,
239 suction tubes in their noses, mouths, and tracheae, and caustic liquid
240 instilled into their eyes. They also face separation and isolation from their
241 mothers at the moment of birth, the most critical period for infant-
242 maternal bonding, the period most important for early attunement.

243 The developing nervous system would create *imprints*, using Janov’s
244 (1983) term, of these disturbances which would leave “lifelong effects”

(title page). The body would hold this trauma (Rothschild, 2000), while words would arise later to make sense of these events.

Dr. Scaer (2001) counters cultural beliefs that reflect the “medical philosophy of birth” (p. 153) with a view espoused by many prenatal and perinatal psychologists.

Birth is an inherently natural process. It provides the earliest opportunity for enhancement of infant brain development required to provide resiliency in the face of threat through early maternal bonding. The brain at this stage of life is not at its most adaptable state; it is rather at its most vulnerable. Exposing the newborn to traumatic stress through thoughtless invasive and painful medical procedures is senseless and dangerous. Many child psychologists feel that the roots of societal violence, at least in part, relate to birth trauma. (p. 153)

The brain grows from the inside out; the hind brain, known as the reptilian system develops first, followed by the midbrain or limbic brain, and finally, the thick outer layers, comprised of the right and left hemispheres, are added (MacLean, 2002). This development is not complete until adulthood, but the fetal system that is online at birth is the reptilian brain, insuring survival by taking care of essential functions such as respiration, circulation, digestion, and elimination. During the first year of life a child is developing the limbic brain and learning from caregivers about emotions (Pearce, 1992). The limbic system is developing, bonding and attachment dynamics are being established, and children are learning whether the world is friendly—and if they are safe in it.

MacLean (2002) stated, “It seems that the ancient limbic system provides ingredients for the strong affective feelings of conviction that we attach to our beliefs, regardless of whether they are true or false!” All of a child’s feelings, and thoughts about them, are reinforced as the hemispheres come online. Beliefs are instilled very early and persist relentlessly unless we begin to question them and consciously work to change them.

Lipton (2005) has pointed out that cells are conditioned to respond based on the environment. They subsequently remember how to respond to new situations in those conditioned ways. Thomas Verny (2014) has developed a convincing argument in support of cellular memory. In “What Cells Remember: Toward a Unified Field Theory of Memory,” he cites extensive and diverse research supporting “the hypothesis that memory can also be stored in all the cells of the body, not just nerve cells” (p. 16). Even twelve years earlier Dr. Verny (2002) had stated in *Tomorrow’s Baby: The Art and Science of Parenting from Conception through Infancy*, “From the moment of conception, the stories of our lives become encoded in the cells of our bodies and the neural circuits of our brains”. (p. 168).

287 So, extrapolating from experts who tell us that we have memory in all
288 of our cells, we can predict that when a woman enters a hospital, the locale
289 selected by more than 98 percent of pregnant women (influenced greatly
290 by their insurance companies who base their decisions on the fear of
291 litigation), she brings all of the language in both images and words she
292 has internalized into an energetic field (McTaggart, 2002) of thoughts,
293 feelings, policies, and procedures. The entire milieu has been established
294 to address women who, as Odent (2016) pointed out, are believed to need
295 help, guidance, support, management, coaching and control. A woman's
296 own thoughts, fostered by the very language she uses, predispose her to
297 accept all of this with a sense of relief. After all, as Odent (2016) implied,
298 she has learned she cannot give birth without all that help.
299

300 The Language We Speak

301
302 Language allows us to communicate. According to Andrew Newberg,
303 director of research at the Myrna Brind Center of Integrative Medicine at
304 Thomas Jefferson University Hospital and Medical College, and co-author
305 Mark Robert Waldman, Executive Communication and Neuro-Leadership
306 instructor at Loyola Marymount University (2013):
307

308 Without language, we would find ourselves living in a state of
309 emotional chaos. Our brain has given us the potential to communicate
310 in extraordinary ways, and the ways we choose to use our words can
311 improve the neural functioning of the brain. In fact, a single word has
312 the power to influence the expression of genes that regulate physical
313 and emotional stress. (p. 5)
314

315 Choosing the right words can enhance our brain performance, improve
316 our health, and, by the way, influence the changes we seek to initiate in
317 society as a whole.

318 Neurologist Richard Restak (1991) explains that as we communicate
319 "words trigger an emotional response" (p. 158). The amygdala within the
320 limbic system of the brain are bombarded with stimuli, perceived as
321 positive or negative, and become "encoded in our brain, where they provide
322 underpinnings for memory and personality" (p. 158). Restak states, "On
323 the basis of the subtle and sometimes not-so-subtle impact of certain
324 words, each person literally lives in his or her own reality" (p. 159). The
325 connotation of each word and phrase becomes relevant: if *delivery* implies
326 a sense of helplessness, if *failure* precipitates a feeling of disappointment,
327 if *nine months* suggests an end to a pregnancy too soon, we need to watch
328 our words as their impact may be stimulating responses that are

329 perpetuating an obsolete and damaging childbirth paradigm. Newberg
330 and Waldman (2013) explain how our language-based thoughts become
331 reality.

332 In the center of our brain there's a walnut-shaped structure called the
333 thalamus. It relays sensory information about the outside world to the
334 other parts of the brain. When we imagine something, this information is
335 also sent to the thalamus. Our research suggests that the thalamus treats
336 these thoughts and fantasies in the same way it processes sounds, smells,
337 tastes, images, and touch. And it doesn't distinguish between inner and
338 outer realities. Thus, if you think you are safe, the rest of your brain
339 assumes that you are safe. But if you ruminate on imaginary fears or self-
340 doubt, your brain presumes that there may be a real threat in the outside
341 world. Our language-based thoughts shape our consciousness, and
342 consciousness shapes the reality we perceive. So choose your words wisely
343 because they become as real as the ground on which you stand. (p. 57)

344 Let us consider a pregnant woman in labor entering a hospital. Many
345 women are initially afraid. This is a common occurrence and is aptly
346 named "white coat syndrome" (Mankad, n.d.). This syndrome causes an
347 elevation of blood pressure and is experienced by an estimated 20 percent
348 of the population, women and men alike, when going into a hospital or
349 doctor's office. When experiencing fear, the body's autonomic nervous
350 system responds with fight, flight, or freeze. This inherent reaction causes
351 the laboring woman's body to contract, that is, her cervix will constrict.
352 Like any normal mammal she will instinctively slow or stop labor until
353 the danger she perceives—real or imagined—has passed. However, in
354 hospitals this response is labeled *failure to progress*. Having just begun
355 the process of giving birth, she is already a failure. She may think she is
356 doing something wrong or is otherwise not performing the way medical
357 staff thinks she should. It is no wonder that this perception initiates the
358 proverbial cascade of interventions.

359 "Failure to progress' is the number one reason for unplanned C-
360 sections in the U.S." (Dekker, 2013). Women are told that they are not
361 dilating fast enough, indeed, entry into some hospitals puts women on the
362 clock, causing them to acquiesce to induction of labor with Pitocin followed
363 by an epidural when the intense contractions stimulated by artificial
364 oxytocin are too painful to endure. If those procedures do not result in the
365 baby being born soon enough, a C-section will be performed.

366 Failure to progress is a label that is damaging to a woman's self-
367 esteem and would be a good term to eliminate from our vocabularies. We
368 need to adopt attitudes, words, and behaviors that encourage laboring
369 women to relax, slow down, and know that labor will resume when they
370 *and* their babies feel safe. We might ask, what's the rush? In most cases

371 it is simply an institutional policy to promote efficiency. As Rikki Lake
372 (2009) pointed out in her documentary film *The Business of Being Born*,
373 birth is big business.

374 375 **What Each of Us Can Do** 376

377 It is a well-known aphorism that effective change begins at the grass
378 roots level. In recent times President Barack Obama (1995) has said,
379 “Change won’t come from the top. Change will come from mobilized
380 grassroots.” We can mobilize to promote the paradigm shift we want to see
381 by changing a few of the words and expressions we use when we talk about
382 childbirth. We are the agents of the profound change we wish to see.

383 Blessedly, beliefs, and the brains/minds that absorbed them, can
384 change. Following the 1990s which became known as the decade of the
385 brain, numerous books have been written presenting ways to change our
386 brains/minds. In *Parenting from the Inside Out: How a Deeper Self-
387 Understanding Can Help You Raise Children Who Thrive*, Siegel and
388 Hartzell (2003) encourage increased self-awareness. Calling both
389 hemispheres of the brain into service, the authors provide examples of
390 healthy self-talk noting how the left brain’s language capabilities can ease
391 right brain anxiety. Introspection is a good first step to creating change as
392 it causes us to hear what we are saying to ourselves. When we examine
393 our self-talk, it leads to speaking to others more mindfully as well.

394 Lind-Kyle in *Heal Your Mind, Rewire Your Brain* optimistically
395 states, “the process of changing the brain is quite simple” (2010, p. 91).
396 Author Lind-Kyle describes how “our brains are constantly rewiring
397 themselves in response to events in our lives” (back cover). She provides a
398 guide to re-program our neural networks by accessing the brain wave
399 states of beta, alpha, theta and delta. She focuses on beliefs we have
400 internalized and suggests ways to release negative beliefs cognitively,
401 emotionally, and behaviorally.

402 *Train Your Mind, Change Your Brain* by Sharon Begley (2007), is
403 another book in this genre. In the forward endorsing Begley’s work, the
404 Dalai Lama comments:

405
406 Buddhist practitioners familiar with the workings of the mind have
407 long been aware that it can be transformed through training. What is
408 exciting and new is that scientists have now shown that such mental
409 training can also change the *brain*. (p. viii)

410
411 The Dalai Lama, known to be concerned about the welfare of the
412 world’s children, further recognizes a mother’s role:

413 Findings that show how a mother's expressions [words] of love and
414 physical contact with her child can affect the triggering of different
415 genetic responses tell us a great deal about the importance we need to
416 give to bringing up [and bringing in] our children if we wish to create
417 a healthy society. (p. viii)
418

419
420 Begley (2007), science columnist and a senior editor at *Newsweek*
421 magazine, integrates science and spirituality in her approach to changing
422 the brain. She departs from the old "doctrine of the unchanging human
423 brain" (p. 7) stressing instead the scientific discovery of neuroplasticity.
424 She cites research showing that, indeed, change is possible. She notes that
425 attention is "indispensable for neuroplasticity" (p. 158). Begley
426 recommends meditation practices, merging Eastern Buddhist tradition
427 with Western scientific knowledge.

428 Biologist Bruce Lipton (2005) has described how our beliefs are
429 programmed at the cellular level. Asked what can be done to change
430 undesirable programming, Lipton endorses PSYCH-K®, developed by his
431 colleague Rob Williams. This is the modality that Lipton personally uses.
432 PSYCH-K® is an energetic healing modality that can "rewrite the
433 software of your subconscious mind" (www.brucelipton.com). It is "a
434 unique and direct way to identify and change subconscious beliefs that
435 perpetuate old habits and behaviors that you want to change"
436 (<https://www.psych-k.com/>). Workshops are available to learn this
437 technique, as there are for Thought Field Therapy (n.d.), Emotional
438 Freedom Technique (EFT), Tapas Acupressure Technique (n.d.), and other
439 energy modalities which promote natural healing and improved mental
440 health.

441 Newberg and Waldman (2012), who wrote *Words Can Change Your*
442 *Brain*, outline 12 strategies for conducting compassionate conversations.
443 They thoroughly discuss thinking positively, supporting their
444 recommendations with research. One such approach by Arntz and
445 Weertman (1999) found that negative memories from childhood could be
446 reinterpreted using "(i) imagery with rescripting and (ii) role play"
447 (p. 715). Newberg and Waldman's comment on this study prompted them
448 to say, "You can even undo negative memories from childhood by
449 rescripting the event and imagining a different outcome or solution"
450 (2012, p. 131).

451 The results of a remarkable new animal study from the University of
452 Zurich demonstrate that "behaviors caused by traumatic experiences in
453 early life are reversible" (Gapp, Bohacek, Grossmann, Brunner, Manuella,
454 Nanni and Mansuy, 2016), substantiating the reversal of negative

455 memories and ability to pass on the improvement to future generations.
456 The University of Zurich news release of 22 June 2016 stated “positive
457 environmental factors can correct behavioral alterations which would
458 otherwise be transmitted to the offspring.” Behavioral and psychological
459 evidence is revealing that healing and positive changes are possible.
460 Preventing negative beliefs in the first place is a worthy goal that research
461 is showing can be assisted by eliminating negative beliefs and behaviors
462 so they are not passed on to our progeny.

463 Newberg and Waldman (2012) stress that we each “need to
464 consciously identify, then root out, the negative beliefs that have been
465 unconsciously stored away in long-term memory” (p. 131). Getting to the
466 root of our negative beliefs is a step in becoming the grass roots of a new
467 childbirth paradigm. Newberg and Waldman provide assurance that,
468 “when we change our words, we change our brain, and when we change
469 our brain, we change the way we relate to others” (p. 207)—and we model
470 the changes we wish to see.

471 Martin Seligman (2006), professor of psychology and past president of
472 the American Psychological Association, is known as the father of Positive
473 Psychology. He has spent his career investigating learned helplessness
474 and how we are conditioned to quit or believe that what we do will not
475 make a difference. In *Learned Optimism: How to Change Your Mind and*
476 *Your Life*, he counters the belief that we are powerless by revealing how
477 we justify helplessness to ourselves and how we can replace this reasoning
478 by cultivating an optimistic explanatory style. Speaking to each reader,
479 Seligman advises finding “the word in your heart” (p. 16). Seligman says
480 we each (metaphorically) carry a *yes* or a *no* in our hearts representing our
481 tendency toward optimism or pessimism. A *yes* empowers and energizes
482 us while a *no* disempowers and discourages us. With introspection, we can
483 discover the word in our hearts and begin to assume greater personal
484 control of our lives; we can overcome pessimism and become more flexibly
485 optimistic.

486 Daniel Amen (1998), clinical neuroscientist, child and adolescent
487 psychiatrist, and medical director of the Amen Clinic for Behavioral
488 Medicine in Fairfield, California, wrote *Change Your Brain, Change Your*
489 *Life*. His approach is physiological, relying on brain scans, single photon
490 emission computerized tomography (SPECT), to study brains and identify
491 treatment and resources that effectively improve the quality of his
492 patients’ lives. He notes that the “deep limbic system” (p. 37), which is
493 developing in utero, “is power-packed with functions, all of which are
494 critical for human behavior and survival” (p. 37).

495 Amen (1998) has serious concerns, saying, “Bonding and limbic
496 problems often go hand in hand. One of the most fundamental bonds in

the human universe is the mother-infant bond” (p. 44). This bonding can be disrupted by a mother’s depression following birth, causing her to withdraw from her baby. Since Amen wrote his book, new research is revealing that interventions, particularly the administration of epidurals, are associated with increased risks of postpartum depression (Kendall-Tackett, Cong, & Hale, 2015). These researchers analyzed the data from a 253-item survey completed by 6,410 mothers within a year of giving birth and concluded, “Contrary to previous findings, epidurals are associated with lower breastfeeding rates and higher rates of postpartum depression” (p. 87).

The American Pregnancy Association (2015) reports on its website: “Epidural anesthesia is the most popular method of pain relief during labor. Women request an epidural by name more than any other method of pain relief. More than 50% of women giving birth at hospitals use epidural anesthesia.” It is estimated that 10 to 15% of women experience postpartum depression, a significant enough portion to cause an evaluation of the frequent use of epidurals.

Amen suggests several processes to heal his patients’ symptoms that arise from their deep limbic systems: first, he notes that “thoughts are real, and they have a real impact on you and how you behave” (p. 57). Thoughts often come in the form of words, phrases, and sentences. He stresses that negative thoughts release chemicals that increase tension, heart rates, and sweating, while positive thoughts release chemicals that cool the deep limbic region of the brain, slow heart rate and breathing, increase muscle relaxation, and decrease sweating. He suggests paying attention (essential for neuroplasticity) to all our thoughts and our bodily reactions to each thought to begin reinforcing those that are positive and diminish those that are negative. He admonishes, “Remember the deep limbic system is responsible for translating our emotional state into physical feelings of relaxation or tension” (p. 58). As a neuroscientist Amen states unequivocally, “every cell in your body is affected by every thought you have” (p. 58).

This knowledge is particularly important for pregnant women. Lipton (1995), in *Early and Very Early Parenting: Maternal Emotions and Human Development*, states:

During pregnancy, the parent’s perception of the environment is chemically communicated to the fetus through the placenta, the cellular barrier between the maternal and fetal blood. The mother’s blood-borne emotional chemicals cross the placenta and effect the same target cells in the fetus as those in the parent. (www.birhtpsychology.com)

539
540 This awareness could prompt discussions about paternal
541 involvement, particularly since “1 in 4 children under the age of 18—a
542 total of about 17.4 million—are being raised without a father”
543 (<https://singlemotherguide.com/single-mother-statistics/>). Additionally,
544 socioeconomic factors play a huge role as mothers, attempting to work and
545 simultaneously raise children, experience stress which contributes to
546 anxiety and depression. All of these factors will ultimately need to be
547 addressed as they are societal issues. To begin, however, we can look at
548 our individual responsibility—our own beliefs and thoughts, and the
549 words we use to express them, which can bring about change in all of the
550 related areas discussed here.

551 **Resources for New Parents**

552
553
554 There are many childbirth programs that encourage relaxation,
555 mindfulness, self-regulation through breathing, and even raise the
556 awareness of words that instill confidence (or fear). Find those programs
557 that you favor to recommend to your clients. Calm Birth, the Bradley
558 Method, Lamaze, and HypnoBirthing® are all excellent courses in
559 countering anxiety and heightening relaxation. For example, in *Calm*
560 *Birth: New Method for Conscious Childbirth*, author Robert Bruce
561 Newman (2005) teaches a whole new vocabulary to pregnant women. He
562 introduces Eastern Meditation principles and practices while honoring a
563 “woman’s need for privacy, low light, spontaneous movement, and freedom
564 to vocalize undisturbed in labor” (p, 92). The Bradley Method is a 12-week
565 course for couples teaching husband-coached natural childbirth. Positive
566 communication is emphasized (www.bradleybirth.com). “Lamaze
567 education helps women to gain confidence in their bodies, to trust their
568 innate ability to give birth and to make informed decisions about
569 pregnancy, birth, breastfeeding and parenting” (www.lamaze.org).

570 *HypnoBirthing*® (Mongan, 2005) teaches relaxation during labor
571 emphasizing “what is experienced in the body is determined in the mind”
572 (p. 65). Mongan’s text points out that “words and thoughts are powerful
573 and profoundly affect our everyday experiences and beliefs. Equally
574 significant is the harm that is created by the negative energy of the
575 confusing, harsh and frightening words of conventional birthing” (p. 67).
576 Medicalized language is contrasted with HypnoBirthing language. Of
577 course, birth and birthing are words to replace deliver and delivery. Other
578 word substitutions worthy of note are *uterine surge* or *wave* for
579 contraction, *birthing time* for due date, *membranes releasing* for water
580 breaking or rupturing, and *special circumstances* for complications. This

581 attention to the language of childbirth reduces fear and increases the
582 potential for a gentle, natural birth.

583 I have presented *Mothers' Minds Matter* at an annual International
584 Society for Pre- and Perinatal Psychology and Medicine (ISPPM)
585 conference in Heidelberg, Germany as well as at an APPPAH conference
586 in Canada. Seeking to empower women, I created a short process I called
587 *Picturing a Better Birth*© to help pregnant women use their powerful
588 minds to envision an ideal birth. Newberg and Waldman have validated
589 the use of positive visualization stating, "Positive imagery can reduce a
590 negative state of mind, whereas negative images will maintain or enhance
591 a negative mood" (2013, p. 131).

592 The concept for this visualization exercise arose from my doctoral
593 research, a qualitative study that generated a dissertation titled
594 *Primiparas' Expectations of Childbirth: The Impact of Consciousness*.
595 Each woman I interviewed drew a picture of her ideal birth while she was
596 pregnant and then reported during our second meeting how her
597 experience of giving birth matched her ideal. These women taught me
598 what to include in an exercise I could share with others.

599 Picturing a Better Birth© utilizes an acronym: PR-I-M-E-S which
600 stand for the elements to include in a drawing of an ideal birth—the best
601 one a pregnant woman can imagine. PR stands for Process, I for Infant, M
602 for Mother, E for Environment, and S for Supporters. Drawing accesses
603 the limbic brain with its connections to the visual, spatial, non-verbal
604 right hemisphere (Siegel & Hartzell, 2003), and evokes feelings associated
605 with the ideas that are out-pictured. Women are urged to use all their
606 senses including sound (music) and smell (fragrances) while visualizing.
607 They are advised to think positively using encouraging words which
608 utilizes the left brain and its linguistic capacities (Siegel & Hartzell,
609 2003). Finally, they are asked to reinforce their ideal by displaying their
610 art in a prominent place so they can view it often. This easy, fun process
611 can be suggested to a pregnant woman as part of any childbirth education
612 program.

613 Specific Words to Watch

614 Women go to hospitals to "deliver" their babies. Since I began my pre-
615 and perinatal studies, my contention has been that we deliver pizza, not
616 babies. Mothers give birth or birth, which is a verb. Babies are born, not
617 delivered. I love the beautiful Spanish expression "dar a luz" for giving
618 birth. My Spanish speaking friends tell me this expression translates "to
619 give to the Light" (Highsmith, 2016). To bring from the darkness of the
620
621

622 womb into the light is a much more pleasant way to think about birth than
623 delivery!

624 Delivery, the word itself, suggests that someone other than the mother
625 brings the baby into the light. To restore the respect women deserve for
626 giving the gift of life, you could substitute words like birthing (the verb)
627 or giving birth (my favorite). Stop asking women who delivered their
628 babies. I contend that giving birth is more than a mechanical procedure
629 facilitated by technicians who can then take credit for delivering the baby.
630 Our words can reflect the deeper reverence we have for life, and for a
631 woman's singular role in giving that gift.

632 Another common expression I suggest we change is calling the term
633 of pregnancy nine months. An ideal pregnancy lasts ten months. The
634 March of Dimes has a campaign to educate the public about the 280 days
635 it takes for a baby to develop in the womb. Here is my point: nine
636 months, which is so well known that it became the title of a popular
637 movie, is often thought of as nine periods of four weeks each or a total of
638 36 weeks. If we are influencing our babies while they are in utero, they
639 are being inundated with the words, thoughts, feelings, and beliefs that
640 they should only stay in the womb for 36 weeks instead of 40. The short
641 duration of 36 or 37 weeks is defined as prematurity and premature
642 births account for 9.6 percent of births today (March of Dimes). The
643 March of Dimes declares:

644
645 In the United States, more than 540,000 babies are born too soon each
646 year. Preterm birth is a serious health problem that costs the United
647 States more than \$26 billion annually, according to the Institute of
648 Medicine. It is a leading cause of infant death, and babies who survive
649 an early birth often face the risk of lifetime health challenges,
650 including breathing problems, cerebral palsy, mental retardation and
651 others. (www.marchofdimes.org)

652
653 I ask, are we sending a message to our sentient prenatals that urges
654 them to arrive too early? Their brains increase in size by another third
655 during the last few weeks of a 40-week pregnancy. The best place for that
656 growth to occur is in the womb.

657 Babies are listening. They are aware and paying attention
658 (Highsmith, Landsberg, & Vernallis, 2004). They are often very compliant
659 and will take care of their mothers. Many prenatals are *fetal therapists*, a
660 term I learned at Santa Barbara Graduate Institute but which has not
661 been popularized enough to be found doing a google search. They will be
662 still in utero when movement disturbs mother or when they feel unwanted
663 (David, Dytrych, Mastejeek, & Schuller, 1988). Babies will leave when

asked (McGarey, 2000), or respond to Daddy's tapping on mommy's belly by tapping back (Van der Carr, 1997). Babies are smart, even before birth, and will initiate their own labor and birth (Gao et al., 2015).

As psychologists and educators we can lead the way in changing the paradigm of childbirth by watching our words. We can stop using *delivery* language and replace that term with *giving birth* or *birthing*. Think of all those items that are delivered: newspapers, pizza, mail, even speeches. Make birthing or giving birth your choice to honor and empower mothers *and* the babies they carry.

We can reject labels like failure to progress. Point out to pregnant women that if they choose a place to give birth other than their own homes, they can locate facilities and caregivers that promote relaxation and the easing of fears so birth can take place naturally. Find those resources yourself so appropriate referrals can be made. Encourage laboring women to refuse to be rushed and to stay connected to their unborn babies. Babies are listening and want birth to be as stress free as possible for everyone.

We can begin to talk about pregnancy as a 280-day/40-week/10-month process. This reflects lunar time. Women's bodies cycle every 28 days beginning at puberty and the commencement of menstruation. They continue this rhythm until menopause. Pregnancies occur within this timeframe. *Ten times 28 equals 280* ($10 \times 28 = 280$) is a simple equation for the timing of a perfect pregnancy.

Benediction

A good way to think about the words we use is to consider a *benediction*. "A benediction is a blessing. ... The noun benediction comes from the Latin roots bene, meaning "well" and diction meaning "to speak"—literally to speak well of" (<https://www.vocabulary.com>).

Mahatma Gandhi eloquently said, "Your beliefs become your thoughts, your thoughts become your words, your words become your actions, your actions become you habits, your habits become your values, your values become your destiny." (Ghandi, n.d.) Good words, underpinned by good thoughts and beliefs, are vital to change the paradigm in childbirth.

Choosing good words, as Newberg and Waldman (2013) state, is essential because words become reality. The paradigm shift in childbirth depends on speaking good words—benedictions. We can consciously cultivate a language of childbirth that embodies compassion and respect for pregnant women and their babies better than we have. This may seem

705 too elementary, but change at the grass roots level begins with
706 uncomplicated notions.

707 My motto is: change the childbirth language you use and change the
708 world of childbirth.

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