Childhood Immunizations: A Utilitarian and Ecological Approach

Part 2 of 3

Family Theory Paper

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#### Abstract

Per the preceding paper, it has been established that despite the public health platform, the family unit is seeking better answers regarding the efficacy and safety of childhood immunizations. Though it is collectively declared by pediatricians, public health officials and often members of our social network "the benefits outweigh the risks," this paper utilizes sociological approaches to examine why a new wave of adults is beginning to take responsibility for the reality behind vaccine efficacy and safety. It is concluded that informed individuals will likely continue to make decisions regarding what is best for the health and well-being of the private family despite what is being conveyed by the public health platform.

### Introduction

Dr. Suzanne Humphries, a medical doctor specializing in internal medicine and nephrology states "Individually and collectively, we need to be doubting the safety and effectiveness of all the vaccines at this point. There are many unanswered questions." She continues, "It is the belief of the International Medical Council on Vaccinations that the vaccine program needs to be questioned" (Humphries, 2011). Dr. Humphries is part-author in a new book entitled *Vaccines: Get the Full Story, Doctors, Nurses and Scientist on Protecting Yourself and Your Children.* The book is signed by hundreds of health officials and family physicians, and warns people about the risks of vaccines. A well-established argument of the pro-vaccine campaign is that vaccinations alone are responsible for the eradication of both small pox and polio (Humphries, 2011). According to Dr. Humphries, "At one point I believed that to be so myself. That is certainly what doctors are taught in medical school. We have no reason to doubt that... unless we start doubting any of the information we are told about vaccines." She goes on to further explain:

When one is to go back and read in history on how the vaccine was developed and what was in it, there are numerous reports of death rates and the small pox rates increasing concurrently in vaccinated portions of England . However, in those areas that rejected small pox, rates plummeted. What was making people susceptible to disease was poor sanitation, war, homelessness, overcrowding, and wide spread nutritional deficiencies. Furthermore, the smallpox vaccine does not contain the virus that causes smallpox in it. It is actually made with the virus that causes cow pox, which is genetically different from small pox. One must start questioning the reasoning and the logic behind saying a vaccine that has orthopox can protect against smallpox. What we uncovered are suppressed reports of highly vaccinated populations still developing small pox, and many reports of those with who received the smallpox vaccine going on to develop cow pox (Humphries, 2012).

Disconcertingly, the Centers for Disease Control and Prevention admits, "the small pox vaccine does not contain the smallpox virus and cannot spread smallpox"(CDC, 2004). The CDC further states, "The level of antibody that protects against smallpox infection is unknown" (CDC, 2001). Dr. Suzanne Humphries explains, "There have been no studies to show the small pox

vaccine is effective against small pox (Humphries, 2012). In fact, according to Dr. Humphries, the CDC discloses that "it has never been proven that the vaccine is effective against small pox" (Humphries, 2012). In the CDC's exact words, stated by the Advisory Committee on Immunization Practices subgroup, "The effectiveness of the vaccinia (smallpox) vaccine has never been measured precisely during controlled trials (CDC, 2001).

In today's society, this is a notable example of the credible research-based knowledge in which the average individual can easily gain access. Given the emergence of the informed patient, who is sociologically rooted in a theoretical base of utilitarianism and adaptation , and with the benefit of modern-day access to the Internet, the social construction of childhood vaccination is changing. In fact, collective trust in vaccine research is waning. According to a 2010 CDC report, 39% of parents surveyed in the U.S. said they either delayed or refused vaccinations for their children (DeNoon, 2011). Almost half of all parents surveyed in the U.S. question the validity of vaccine safety data because of the influence of pharmaceutical companies (DeLong, 2012). Over 40% believe the government is covering up information about vaccine safety (DeLong, 2012).

Not only parents but healthcare workers including new doctors are also raising considerable questions about vaccine safety. In a recent study, new doctors were found to be more skeptical about vaccine safety than their older peers (DeLong, 2012). Another study revealed that only 40% of health care workers received the recommended influenza shot. Refusal by health care workers included concern over efficacy and adverse reactions (DeLong, 2012). This paper seeks to utilize varying sociological approaches to further explore the reality behind childhood immunizations. Utilizing two separate theories, we will inquire as to what motivations and actions have resulted in our current state facing the vaccine debate. The first theory, known as utilitarianism will help us recognize how a person's interests and values can determine their actions, as individuals choose the course of action that produces the greatest benefit. Second, the ecological theory will focus on both the adaptation of individuals to global change. This theory will also allow us to study the ecological principle of population vs. the individual in the context of the public health platform vs. the private family.

## **Utilitarian Theory**

Upon exploring our first theory, the essence of utilitarianism is that individuals rationally weigh the rewards and costs associated with behavioral choices (White & Klein, 2008). As individuals, we choose those activities that maximize our rewards. The common thread with the utilitarianism approach is that human beings are motivated and act so as to maximize those outcomes they most value (White & Klein, 2008). Regarding the vaccine debate, seeking answers to a given party's conflicts of interest can reveal helpful information, as the utilitarian approach helps us understand that actors rationally calculate the ratio of rewards to costs for all possible choices in a situation and then choose the action that will bring the greatest rewards for the fewest actions.

Per the implementation and dissemination of medical journals and vaccination studies, we gain clear insight into apparent conflicts of interest. "It is important to take into consideration that much research is sponsored by vaccine manufacturers and public health bodies, who have financial and bureaucratic interests that could impede the objective study of vaccine safety." (DeLong, 2012). According to neurologist Dr. Neil Z. Miller,

Studies are overwhelmingly funded by vaccine manufacturers and pharmaceutical companies with a large financial interest in the outcome. Results may be preordained. For example, tobacco collectively used the same ploy, as they financed numerous bogus studies ostensibly "proving" that cigarettes do not cause cancer. Further, lead authors of studies are often beholden to the manufacturers in some way. They may own stock or they may be paid by manufacturer to travel and promote vaccines. Many receive consultation fees, grants and other benefits from the drug maker (Blaylock and Miller, 2008).

Washing ton (2011) details the reliance of medical journals on advertising from pharmaceutical companies, which can account for up to 99% of a journal's advertising revenue. Pharmaceutical companies also provide funds to medical journals by purchasing article reprints and subscriptions that the companies distribute to physicians.

It is evident these conflicts of interests can undoubtedly compromise the integrity of any clinical study. As a consequence, considerable gaps exist within the culture of vaccine studies. For example, studies tend to observe the effects of a vaccine for only a few weeks after the administration of the shot, so long-term effects are unknown (DeLong, 2012). One standard practice within clinical studies is in the comparing of vaccinated people to other vaccinated people (Blaylock & Miller, 19). And further, there exists intentional exclusion of certain groups

in vaccine studies, but the vaccine is then recommended for people in all groups (DeLong, 2012). Most disturbingly, no study of the safety of the entire U.S. vaccine schedule has ever been undertaken. That is, the safety of the combination of vaccines is unknown (DeLong, 2012).

Further, regarding the prevalence data on autism, former director of the US National Institutes of Health, Dr. Bernadine Healy, commented that public health officials were *not* pursuing a possible link between vaccines and autism out of fear for what they might find and the effects on the vaccination program. Furthermore, no research sponsor has supported a largescale study of the prevalence of autism among vaccinated vs unvaccinated children, nor are vaccination records included in prospective studies.

Clearly, vaccine manufacturers have a conflict of interest related to the tension between the utilitarian approach of making profits and the responsibility to study the negative side effects of their products. Vaccines are a large and growing business. Worldwide sales of pediatric vaccines in 2009 were \$11.5 billion (Sahoo, 2010). Sales are expected to reach close to \$20 billion by 2014 (Sahoo, 2010). Once manufacturers have met the expensive regulatory hurdles of vaccine approval, they have little incentive to research the safety of their products(DeLong, 2012).. Moreover, vaccine manufacturers do not face the threat of lawsuits that might motivate other industries to seek to improve safety. The National Childhood Vaccine Injury Act of 1986 protects vaccine companies in the United States from being sued (DeLong, 2012).

Powerful individuals within the medical organization, including members of the American Medical Association (AMA), the American Academy of Pediatrics (AAP), the Food and Drug Administration (FDA), the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO), are aware of vaccine safety and protection deficiencies, but seem to have an implicit agreement to obscure facts, alter truth and deceive public (Blaylock & Miller, 2010).

The Food and Drug Adminsitration operates with unmistakable conflicts of interest. The FDA's role is to evaluate and approves vaccines for safety and efficacy. Sponsoring research that finds a link between autism and vaccines that the FDA has approved could greatly damage the Administration's reputation and reduce public trust in the FDA (DeLong, 2012). If the information the FDA is mandated to provide the public includes studies that show vaccines could be related to autism, it would be providing evidence for claims being filed within its own agency (DeLong, 2012). As of Dec 2011, over 5,600 autism claims have been filed (DeLong, 2012). The average payout for vaccine related injuries is close to \$825,000, so the autism claims would cost the Program over \$4.6 billion (DeLong, 2012). Additionally, more parents would seek compensation if autism was recognized as a vaccine injury (DeLong, 2012).

The Centers for Disease Control also demonstrates apparent vested conflicts of interest. If the research the CDC sponsors were to identify vaccines as being hazardous and if the vaccination schedule it recommends is associated with autism, it would be forced to concede that its policies did not support its goals and actually promoted disabilities. Since the CDC is charged with promotion of vaccination safety programs as well as assessing vaccine risks, it might be reluctant to sponsor research that uncovers risks it may have created (DeLong, 2012).

Even members of U.S. Congress may be reluctant to sponsor research into vaccine safety for at least two reasons: contributions and prospects of future employment. According to the Center for Responsive Politics, since 2005 the pharmaceutical industry has employed at least three lobbyists for every member of Congress, more than any other industry (CRP, 2011). Further, over half of the lobbyists employed by the pharmaceutical industry in 2008 had worked in Congress or another branch of the federal government, and 35 had been former members of Congress (Beckel, 2009). Mandating a study that could hurt major contributors or future employers could result in fewer contributions or no offers of employment (DeLong, 2012).

Disturbingly, the government is visibly aware that vaccines may permanently disable or even kill one's child. The U.S. government created the national database of vaccine damage, called the Vaccine Adverse Event Reporting System (VAERS).

The Vaccine Adverse Event Reporting System is a national vaccine safety surveillance program co-sponsored by the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA). VAERS is a post-marketing safety surveillance program, collecting information about adverse events (possible side effects) that occur after the administration of vaccines licensed for use in the United States (VAERS, 2012).

Congress established a "hazard" tax on childhood vaccines. When parents pay the doctor for requested shots, a percentage of money goes into a special fund to compensate them when their children are seriously damaged or die (Blaylock and Miller, 2010). As of Sept 2009, \$2 billion was granted for thousands of injuries and deaths caused by mandated vaccines. Numerous cases are still pending. Awards are issued for permanent injuries such as learning disabilities, seizure disorders, mental retardation, paralysis, and numerous deaths, including that were initially misclassified as Sudden Infant Death Syndrome (SIDS) (Blaylock and Miller, 2010). However,

reports of vaccine injuries are not investigated (VAERS, 2012). For example, thousands of parents have reported that vaccines have caused or are associated with their child's autism, yet no research sponsor has launched a major investigation of the children who are alleged to have developed autism from vaccines (Blaylock and Miller, 2010).

Per collective government and medical institutions, there has been extensive cooperation to minimize vaccine failings, exaggerate benefits, and avert negative publicity that might frighten concerned parents, all which could threaten the vaccine program and lower vaccination rates (Blaylock and Miller, 2010). Lowered vaccination rates would undoubtedly lead to lowered utility via decreased profits for the multitude of parties involved. Further, "the media is loathe to publish anything that challenges the sacrosanct vaccine program. Newspaper articles and reviews about vaccine studies merely mimic the original spurious conclusions" (Blaylock & Miller, 2010).

How does the sociological theory of utilitarianism apply to the parents of children who are targeted for childhood immunizations? According to a recent article published in the *Journal of Theoretical Biology*, "the pursuit of self-interest among vaccine skeptics is leading to vaccination levels that are suboptimal for a population "(Shim et al, 2011). "Parents have various reasons for refusing or delaying vaccinations, one of the most often cited is perception of high vaccine risk or low vaccine efficacy (Smith, 2010). Specifically, 25% of parents who refused or delayed vaccination in the US questioned whether vaccines really worked, 25% cited worries that measles vaccines may cause autism, and 24% worried about side effects (Smith,

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2010). One study found that 34% of parents believed that the measles vaccination is more dangerous than the childhood disease itself (Smailbegovic et al, 2003).

A recent phenomenon known as the Chickenpox party demonstrates the utilitarian approach in action. Educated parents of health children closely consider costs and rewards of temporary varicella immunity produced via vaccination vs. natural life-long immunity achieved through exposure to the virus. Parents then make choices accordingly that maximize utility. According to an article in the online publication *Mothering*, one mother states "Yes, it sounds cruel and unusual to subject one's child to a biological sneak attack. But we weren't going blindly into this like Tupperware-toting lemmings. We had done our homework. On the kitchen table is a stack of clinical studies citing the pros, cons, dos and don'ts of catching wild chickenpox in the company of friends" (Wimer, 2004).

Rather than suffer the consequences of a temporary immunity to chickenpox via the childhood vaccine, which undoubtedly results in an increased likelihood of the more serious and deadly shingles virus as an adult, many parents of healthy children are choosing for their little ones to manufacture ideal antibodies for a lifetime of immunity at a young age when the virus is not threatening. "Today's conventional wisdom says to go with the shot, which many parents do 'to be on the safe side.' But we at the party were doing what we felt was safest, after weeding through the propaganda and rhetoric about America's latest "Red Scare": the deadly scourge of chickenpox panic"(Wimer, 2004).

Regarding the vaccine's efficacy, the article goes on to explain the shortcomings of the vaccine. "Two years after vaccine licensure, in the 14 states that maintained continuous reporting

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of varicella, the incidence remained completely unchanged, at 107 cases per 100,000 population" (Wimer, 2004). Merck, the company who manufactures the varicella vaccine, credits their vaccine with a significant statistical drop in the number of chickenpox cases reported. However, "reporting of chickenpox cases to state and local health departments dropped from 46 states in 1972 to 20 states in 1997. What declined was the reporting, not the incidence of chickenpox" (Wimer, 2004).

Reagarding the vaccine's safety, a 2000 article in the *Journal of the American Medical Association* disclosed a wealth of reports made by doctors and parents to the Vaccine Adverse Event Reporting System (VAERS). "This FDA report confirms our concern that the live chickenpox vaccine may be more reactive than anticipated in individuals with both known and unknown biological risk factors" said Barbara Loe Fischer, president of the National Vaccine Information Center (NVIC). Further, 4% of varicella vaccine-induced adverse reactions were serious, resulting in shock, convulsions, encephalitis, thrombocytopenia, and 14 deaths (Wimer, 2004). Fischer, whose son was left with multiple learning disabilities and attention deficit disorder after a severe reaction to a DPT shot says "This vaccine should not be mandated. There are too many questions about the efficacy and adverse effect profile of this live virus vaccine" (Wimer, 2004).

As parents take into account the costs associated with the vaccine, it becomes apparent that the wild version has its advantages. It produces much higher antibody levels than the vaccine, making individuals less prone to developing shingles, the adult version of chickenpox. "Catching the wild version can mean the difference between temporary and lifelong immunity." states Kristine M. Severyn, RPh, PhD, a vaccine critic who has exposed drug-policy corruption. She voices that "a widespread national chickenpox vaccination program will likely shift the incidence of chickenpox to adults, where the complication and death rate rise sharply. Today, adults comprise only 2% of chickenpox cases, but are responsible for 47.5 percent of deaths from chickenpox" (Wimer, 2004). Further Dr. Arthur Lavin, a pediatrician at St. Luke's Medical Center in Cleveland agrees, writing in the *Lancet* that routine varicella vaccination in healthy children may pose "grave danger in advancing the age of onset of chickenpox into adulthood" (Wimer, 2004). Even Merck's clinical papers state that "Wild chickenpox is a benign, self limiting disease" (Wimer, 2004). A mother participating in the chickenpox declared, "Yes, we all lost a night or two of sleep with a fussy child. But we felt those missed hours were worth the preservation of our children's health and well-being" (Wimer, 2004). Applying the innate sociological utilitarian approach, we can conclude informed parents of healthy children will continue to choose the scenario that minimizes risk and maximizes utility. In this case of chickenpox immunity and knowledgable parents, natural varicella immunity is the clear favorite.

# **Ecological Theory- Adaptation**

The most basic notion in the ecological approach continues to be adaptation. This concept reaches down to our biological roots and up to large-scale interactive processes at the level of populations of organisms (White & Klein, 2008). The concept of adaptation can be applied to an individual organism's successful adaptation to a specific environmental niche or to global changes (White & Klein, 2008). The recent phenomenon of the knowledgeable patient, given easy and consistent access to the Internet, is helping all parties to better adapt to our quickly changing environment. According to the scientific journal *Vaccine*, "A new generation of the internet (Web 2.0) and its emphasis on user-generated content has combined with characteristics of the current postmodern medical paradigm, creating a new environment for sharing health information (Kata, 2012). The Web facilitates health communication. "Users can engage and educate others by sharing medical histories, treatment successes and failures, or experienced side-effects, resulting in the increased participation of patients as 'active contributors' in their own care, and their subsequent empowerment, the emergence of online communities and social networking, the sharing and collaboration of knowledge, and the personalization of healthcare" (Kata, 2012). "This paradigm has developed new priorities for healthcare: an emphasis on values as well as evidence, focus on risks over benefits, and the rise of the informed patient" (Kata, 2012).

In utilizing the ecological approach's notion of adaptation, we witness the link between the dual nature of humans as constructions of both biology, surviving in environments in which our needs can be met, and modern-day culture, where new information can bring about enhanced livelihood. We then witness the subsequent societal transformations that occur.

#### **Ecological Theory: Population vs. Individual**

According to the literature on Family Theories, "within the ecological theory, human behavior can be on understood on several levels "(White & Klein, 2008). "The two levels that

are most often used are the population and the individual" (White & Klein, 2008). For example, the failure of an organism to successfully adapt to a given environment, leading to that eventual organisms death, may seem a negative outcome at the individual level. "However for the population, the same outcome might represent the evolution of a healthier gene pool or the survival of the group faced with scarcity" (White & Klein, 2008).

Connecting this ecological perspective with childhood immunization, Dr. Miller states "the collectivist mind-set asserts that for the "plan" to be successful it must override the wishes and even safety of the individual" (Blaylock & Miller, 2010). "Given this, doctors typically consider systemic reactions to vaccinations as 'normal.' Most physicians, especially pediatricians, think adverse reactions are' rare' and must be accepted to gain the benefit of the vaccine" (Blaylock & Miller, 2010).

What could be the rationale for a preponderance of pediatricians telling mothers that their child's reactions to these vaccines are normal? According to Blaylock, this trend is based on at least two factors. "One, most pediatricians in my experience know absolutely nothing about a child's brain. The vast majority of physicians have never heard of excitotoxicity, despite the fact that it is the most discussed mechanism in the field of neuroscience. Likewise, it is also the major mechanism in virtually all brain disorders, including strokes, neurodegenerative diseases, viral, bacterial and mycoplasmal infections of the nervous system, seizures, brain trauma and multiple sclerosis" (Blaylock & Miller, 2010). "The second reason pediatricians are telling mothers their child's reactions to these vaccines are normal is that they are trying to avoid a

lawsuit. If the mother can be convinced that everything is well, they may avoid a trip to the courtroom, which would be damaging to their reputation." (Blaylock & Miller, 2010).

In fact, adverse reactions are not as rare as many would believe. In fact the journal *Pediatrics* published a study in which parents were specifically asked to observe any changes in their baby's behavior or physical condition after a shot. Only 7% reported no reactions at all" (Blaylock & Miller, 2010). Additionally, as previously discussed, medical authorities are utilizing clever tactics to hide and alter the data on vaccine injuries. "Problems are reclassified, denying a connection to the vaccine, and more often than not the reaction is brushed off as 'normal'. For example, one deception is to classify cases of polio as 'aseptic meningitis.' By doing so, vaccine proponents can give the illusion that the polio vaccine policy was more successful than it was (Blaylock & Miller, 2010).

The ecological theoretical perspective of population vs. individual also helps us to better understand the parallel's within the sociology of whether pediatricians are the right people to make decisions about what is best for the health of the private family. With the population as a given public social or medical organization, and the individual serving as the private entity or the independent, it is accepted and common practice in our culture for the individual to refer to the doctor and medical establishment to make weighty decisions about the individual. These decisions drastically affect the family unit yet the individual still relinquishes autonomy to the medical organization and places full trust in the practicing physician. Culturally, we assume the doctor has full knowledge and reliably acts in the best interest of the individual. For example, one American mother quotes "I didn't give vaccinations for my children a second thought because that is what my pediatrician recommended. As a non-medical person, I have to rely on their professional judgment when it comes to the health and well-being of my child" (M.H, personal communication, Sept 24, 2012).

However, with new generations of internet savvy consumers, we are beginning to see a sociological movement away from the traditional model toward a new paradigm. "There has been a transition from the 'white coat ethos of the traditional physician' to the current environment of shared decision-making between patients and professionals "(Kata, 2012). The web lets patients actively engage in their own care. "While medical knowledge was previously bound to textbooks and journals, the internet allows access to the 'school of lay medicine,' shifting the locus of power from doctors as sole director's of patients care to the patients themselves "(Forkner- Dunn, 2003). "Patients are depicted as consumers with access to information diversity, their choices no longer restricted by the higher status allocated to 'experts" (Hardey, 2001).

What is the statistical evidence of this movement? Research presents that 80% of internet users now search for health information online (Kata, 2012). Those most likely to do so are adults providing unpaid care for loved ones, such as children. Recent statistics show 16% of seekers searched online for vaccination information, and of this group, 70% say what they found influenced their treatment decisions (Kata, 2012). In fact, surveys indicate the internet now rivals physicians as the leading source of health advice (Sarasohn- Kahn, J., 2008). With the recent emergence of the Internet and the empowered patient, a shift away from the traditional

model of outsourcing to the population is being offset with the individual exercising the privilege to take greater responsibility for their own future as well as for those they love.

When vaccine damage occurs, the individual damaged child is not the only victim, as both the individual and the population are dramatically affected. Parents undergo traumatic experiences when they discover their child was seriously hurt by one or more vaccines (Miller and Blavlock. 2008). Families are destroyed by overwhelming emotional responsibility associated with caring for a vaccine-damaged child. A large financial burden is typical, as well as a deep anger and guilt for consenting to the vaccine. Sadness or grief is experienced for the child who will forever be missing his or her rightful wholeness. There is also a strained relationship between husband and wife, as many marriages cannot withstand the stress. Grandparents grieve for their damaged grandchild and demanding family life their son or daughter is now destined to live. Undamaged siblings receive less time or attention from parents due to special needs of handicapped brother or sister. There is also a sizable communal cost, in the opportunity cost of the lack of contribution to society, as the vaccine damaged child will never be able to contribute in a meaningful way. Everyone suffers to some degree. Furthermore, studies how a disproportionate amount of violent crime is committed by individuals with neurological damage (Blavlock & Miller).

# Discussion

In the end, comprehension of the dynamic sociological situation surrounding the vaccine debate rooted is rooted in and individuals utilitarianism and adaptive complexities. According to our president in a recent State of the Union Address, "each of us deserves the chance to shape our own destiny" (Humphies, 2011). Dr. Humphries continues, "I absolutely agree that via altering our genes and immune systems, mass vaccination is setting up humanity for potential vulnerability to a very aggressive pandemic in the future, leading to even higher rates of chronic degenerative disease and childhood disease. Paralyzing brains and paralyzing immune systems with vaccines impairs that chance to shape our own destiny; it speaks against what our president says is a priority for this country."

## Conclusion

To vaccinate or not is a personal right that should be legislatively guaranteed. Vast sums of money will continue to influence globally, and allow for distorted science, dismissed evidence and ignorance to the scientific approach. It is clearly in the best interest of parents to take an active stance in deciding whether their children will be vaccinated. Indeed parents should not rely on their pediatrician, government or other public institutions to make this call... as the individual is the only one who must live with the long-term consequences of his or her actions, and the direct implications those actions assert on the private and public family.

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