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To All:

The text following this page is a draft review of the excerpted text from an article by Sandra G. Boodman, a Washington Post Staff Writer that appeared on "Page HE01" in the Tuesday, June 10, 2008 issue of the ***Washington Post*** and found online at:
http://www.washingtonpost.com/wp-dyn/content/article/2008/06/06/AR2008060603770.html?nav=rss_health.

The excerpted text of this article, titled, "***VACCINATIONS Faith Lets Some Kids Skip Shots***," was located online and then downloaded on 12 June 2008.

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The formal review, which is titled "**A Review of: 'VACCINATIONS Faith Lets Some Kids Skip Shots'**," begins on the next page.

Introductory Remarks

First, to *simplify this review*, the statements in the article by the author, Sandra G. Boodman, will be quoted in a "Times New Roman" font.

Second, remarks by this reviewer, Paul G. King, PhD, will be presented in indented text following each of the writer's quoted remarks.

In addition, this reviewer's remarks will be in a **dark blue** "News Gothic MT" font except, when he quotes: **a)** from or refers to any federal statute or regulation, the text will be in a "Lydian" font or **b)** from other sources, the quotations will be in an "Arial Narrow" font.

When this reviewer quotes from statements made in the author's article, this reviewer will use an *italicized* "Times New Roman" font.

Finally, should anyone find any significant factual error for which they have published substantiating documents, please submit that information to this reviewer so that he can improve his understanding of factual reality and appropriately revise his views and the final review.

Respectfully,

<S>

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A Review of: “VACCINATIONS Faith Lets Some Kids Skip Shots”

“In public health circles they are known as ‘exempters’ -- parents who for reasons of faith or philosophy choose not to immunize their children against diseases such as measles and whooping cough. Some exempters claim that childhood vaccines contain unnatural or harmful ingredients; others say they regard vaccination as a ‘dark force’ that conflicts with their belief in a benevolent deity; still others are members of a religion that bars invasive procedures.”

This reviewer simply notes that the writer’s:

“*Some exempters claim that childhood vaccines contain unnatural or harmful ingredients*” is a classic example of newspeak – a statement that intentionally misrepresents factual realities, “*childhood vaccines contain unnatural or harmful ingredients*,” as “*claims*” made by “*exempters*.”

Factually, almost all of the ingredients in childhood vaccines other than salt and water are unnatural and/or toxic.

Unnatural Vaccine Ingredients

- ❖ The viruses in the current live-virus childhood vaccines:
 - Measles [Merck’s “ATTENUVAX* (Measles Virus Vaccine Live), a more attenuated line of measles virus, derived from Enders’ attenuated Edmonston strain and propagated in chick embryo cell culture”],
 - Mumps [Merck’s “MUMPSVAX* (Mumps Virus Vaccine Live), the Jeryl Lynn** (B level) strain of mumps virus propagated in chick embryo cell culture”],
 - Rubella [Merck’s “MERUVAX* II (Rubella Virus Vaccine Live), the Wistar RA 27/3 strain of live attenuated rubella virus propagated in WI-38 human diploid lung fibroblasts”],
 - Herpes varicella zoster (chickenpox) [Merck’s “Varicella Virus Vaccine Live (Oka/Merck), the Oka/Merck strain of varicella-zoster virus propagated in MRC-5” human diploid “cells”],
 - Human influenza (MedImmune’s FluMist [3 strains of virus – 2 type “A” and 1 type “B”; “FluMist (Influenza Virus Vaccine Live, Intranasal) is a live trivalent vaccine for administration by intranasal spray. The influenza virus strains in FluMist are (a) cold-adapted (ca) (i.e., they replicate efficiently at 25°C, a temperature that is restrictive for replication of many wild-type influenza viruses); (b) temperature-sensitive (ts) (i.e., they are restricted in replication at 37°C (Type B strains) or 39°C (Type A strains), temperatures at which many wild-type influenza viruses grow efficiently); and (c) attenuated (att) (they do not produce classic influenza-like illness in the ferret model of human influenza infection). The cumulative effect of the antigenic properties and the ca, ts, and att phenotypes is that the attenuated vaccine viruses replicate in the nasopharynx to induce protective immunity”]
- and
- Two rotavirus vaccines:
 - Merck’s RotaTeq [“RotaTeq* is a live, oral pentavalent vaccine that contains 5 live reassortant rotaviruses. The rotavirus parent strains of the reassortants were isolated from human and bovine hosts. Four reassortant rotaviruses express one of the outer capsid proteins (G1, G2, G3, or G4) from the human rotavirus parent strain and the attachment protein (P7) from the bovine rotavirus parent strain. The fifth reassortant virus expresses the attachment protein, P1A (genotype P[8]), hereafter referred to as P1[8], from the human rotavirus parent strain and the outer capsid protein G6 from the bovine rotavirus parent strain”] and

- GSK's Rotarix [“ROTARIX (Rotavirus Vaccine, Live, Oral), for oral administration, is a live, attenuated rotavirus vaccine derived from the human 89-12 strain which belongs to G1P[8] type. The rotavirus strain is propagated on Vero cells,” “a continuous line of African Green (Cercopithecus) monkey kidney cells”¹].

[**Note:** Obviously, these infectious agents are all man-made viruses – made by attenuation or by bioengineering (e.g., FluMist and Rotateq) and thus are most certainly “unnatural” ingredients.]

- ❖ Example substances that are unnatural because they are not normally injected into healthy humans: a) residual components of MRC-5 cells including DNA and protein, b) Neomycin, c) bovine calf serum, d) recombinant human albumin, e) Polysorbate 80, f) dextran, g) Dulbecco's Modified Eagle Medium (DMEM) [where DMEM contains the following ingredients: i) sodium chloride, ii) potassium chloride, iii) magnesium sulfate, iv) ferric (III) nitrate, v) sodium phosphate, vi) sodium pyruvate, vii) D-glucose, viii) concentrated vitamin solution, ix) L-cystine, x) L-tyrosine, xi) amino acids solution, xii) L-glutamine, xiii) calcium chloride, xiv) sodium hydrogenocarbonate, and xv) Phenol red, h) sorbitol, i) xanthan, j) HEPES (4-(2-Hydroxyethyl)-1-piprazineethane-sulfonic acid), k) human serum albumin, l) mannitol, m) Polymyxin B, n) glycerin , o) phenol, p) 2-phenoxyethanol, q) monosodium glutamate, r) hydrolyzed porcine (pig) gelatin and bovine gelatin, s) dibasic potassium and monosodium phosphates, t) Gentamicin sulfate, u) egg protein, and v) Streptomycin — to name a few.

Persistent² Toxic Vaccine Ingredients

- ❖ Thimerosal and
- ❖ Polymerized aluminum-based adjuvants.

With respect to the writer's, “*others say they regard vaccination as a ‘dark force’ that conflicts with their belief in a benevolent deity; still others are members of a religion that bars invasive procedures,*” this reviewer notes that these remarks seem to be factually accurate.

“Regardless of the reason, the ranks of parents exercising nonmedical exemptions to vaccination are growing, public health officials say. Although the number remains small and involves an estimated 2 to 3 percent of the approximately 3 million children who start kindergarten annually, the trend alarms some experts.”

This reviewer is amazed that the writer has:

- Ignored the increasing rates in childhood diseases that, *in the 1970s*, were either “rare” or unknown (e.g., childhood type 2 diabetes and idiopathic dilated cardiomyopathy) that appear to be related to the increased vaccination schedule, *in general*, or the ongoing Thimerosal exposure from the many vaccines that are still Thimerosal-preserved or contain some lower level of Thimerosal, and
- Chosen to focus on the increase in exemptions to vaccination that are being driven by the preceding factual realities as *parents become more informed about*:
 - The knowing underestimation of the danger of severe harm and death that some vaccines carry, and

¹ Page 3 of <http://www.fda.gov/cber/sba/ipoS.pdf>

² Persistent toxic ingredients are human toxic ingredients that are at least locally toxic when injected and that persist in some toxic form in the human body for at least a year at levels that exceed the toxic threshold.

- The hyping of the theoretical benefits of vaccination.

Accepting the validity of the writer's numbers, this means that the parents of more than 96% of kindergarten students are still opting to comply with the early childhood U.S. vaccination schedule.

This is the case despite the growing number of "mandated" vaccines that are neither medically cost-effective nor, *in some cases*, effective and/or proven safe in long-term studies.

"They worry that parents' fears are being stoked by misinformation about vaccines that abounds on the Internet and are using religion as an excuse to opt out of immunization."

First, with respect to the writer's "*parents' fears are being stoked by misinformation about vaccines that abounds on the Internet*," this reviewer finds that the parents' concerns are being stoked more by: a) the outright lies and b) the distortions of fact about vaccines that are:

- Promulgated by government, university and industry "experts" whose prestige and/or financial interests rest on vaccines and mandated vaccination programs, and
- Advertised in the media and/or published in the mainstream media and/or on the Internet.

These publications: i) distort the historical effects of mass vaccination, ii) hype the theoretical benefits of vaccination, iii) conceal or downplay the risks of vaccination, and iv) portray any who dare to question the Establishment's vaccine dogma as belonging to some less-than-rational fringe element.

As far as "*misinformation about vaccines that abounds on the Internet*" is concerned, this reviewer notes that most of the information about vaccines available on the Internet is as, or even more, factual than the propagandized fear-mongering information about vaccines continually disseminated to the public by the pro-vaccine Establishment.

With respect to the writer's "*parents' fears ... are using religion as an excuse to opt out of immunization*," this reviewer first notes that the writer obviously meant to state that parents "*are using religion as an excuse to opt out of immunization*."

However, even when the grammatical error is corrected, this reviewer finds that the writer's statement, *at best*, distorts at least two realities:

1. Factually, parents are making a conscious decision to choose a legally permitted religious exemption to opt out of vaccination.

Thus, parents are: a) exercising the religious freedom granted by the states to select the religious exemption option provided to citizens and b) not "*using religion as an excuse*."

2. IF parents truly wanted to immunize their children from communicable childhood diseases, THEN, after making sure they were healthy and had no nutrient deficiencies and breastfeeding them until the mother dried up, they would withhold vaccination and allow, or, *in some cases*, perhaps help, nature to take its course.

For certain diseases, these parents might decide to choose this natural exposure risk option because disease exposure coupled with contracting a communicable disease is known to provide:

- a higher assurance of immunity,
- more complete immunity, and

c. longer-term immunity

than vaccination. [Nota bene: This reviewer is not recommending this option!]

In other words, *for each vaccine and disease*, the parents should be educated about the true pros and cons for each disease and vaccine, and then the decision on how to proceed should be left up to the parents who should carefully weigh the risks and the benefits and then proceed as they think is best for their children.

In addition, as the writer states later in this article: "*No shot confers 100 percent immunity.*"

Since this is reality, it is medically inappropriate to use words like "immunized" and "immunization," which imply an outcome that is not assured, as even this writer admits, when the correct words are "vaccinated" and "vaccination" or "inoculated" and "inoculation" – words that convey the action taken and its assured outcome.

Here, this reviewer must congratulate the vaccine apologists for their cleverness in using medically inappropriate words to implicitly promise that vaccination provides disease immunity – an outcome that even this writer admits is not guaranteed.

"This refusal, scientists say, threatens a cornerstone of public health."

Here this reviewer first notes that the writer morphs "*public health officials*" and "*some experts*" into "*scientists*" even though many public health officials and vaccine "experts" are most certainly not scientists but are rather administrative bureaucrats.

Second, the election of a religious exemption, an option provided by law, is not a refusal.

Finally, the reviewer notes that the writer fails to define what is the "*cornerstone of public health*" that is being threatened.

"'People are motivated by their fears,' said Paul Offit, chief of the division of infectious diseases at Children's Hospital of Philadelphia and one of the most outspoken defenders of vaccines."

Factually, *when it comes to childhood vaccination*, people are motivated by what they think is in the best interests of their children subject to the constraints imposed by their living situation and the restrictions of the society in which they live.

Thus, this reviewer can only agree that the writer's quote accurately reflects both Paul Offit's pessimistic view of people and the tactics of fear mongering that he favors using in dealing with people, and accurately portrays him as "*one of the most outspoken defenders of vaccines*" even though she neglects to mention his financial conflicts of interest as a consultant to vaccine makers and as one of the patent holders for Merck's RotaTeq rotavirus vaccine.

"'Young mothers today don't see these diseases, they didn't grow up with them. Vaccines were not a 'hard sell' several decades ago, when people saw children killed by measles, brain-damaged from haemophilus influenzae or deaf after a case of mumps.'"

While this reviewer agrees that the writer's remarks here accurately reflects Paul Offit's views, this reviewer notes that, *in place of the historical childhood disease outcomes of which Paul Offit speaks*, today's young mothers see chronic diseases:

- Asthma,
- Chronic obstructive pulmonary disease (COPD),
- Childhood type 2 (and type 1) diabetes,

- Childhood obesity,
- Severe childhood allergies,
- Childhood multiple sclerosis (MS),
- Childhood shingles
- Childhood leukemia,
- Neurodevelopmental disorders including autism, and
- Childhood idiopathic dilated cardiomyopathy (IDCM).

These diseases were unknown or virtually unknown not only to young mothers but also to medicine several decades ago (i.e., in the 1960s).

Moreover, the recognition and increasing incidence of these illnesses follows the increase in vaccination programs from the early 1940s where the only U.S. childhood vaccination programs were: a) the live-virus vaccine (cowpox) program for smallpox and b) the nascent program combining tetanus with the diphtheria vaccine.

Thus, it would appear that today's vaccination programs have led to the replacement of short-lived childhood diseases (which most healthy children survived without any long-term harm) with a multitude of life-long chronic disease conditions that require long-term treatment and significantly reduce the quality of life and, *in most cases*, the life expectancy for those who are afflicted with such.

"I think religious exemptions are used as a default," said Offit, a professor of pediatrics at the University of Pennsylvania who has written several books on vaccines."

Again, this reviewer concedes that the writer has accurately presented Offit's view on religious exemptions and correctly reported that Offit "*has written several books on vaccines.*"

"Half a dozen studies, Offit noted, have found no link between vaccines and autism, one of the major objections cited by those who spurn immunization."

First, this reviewer must disagree with what the writer reports here because the "*(h)alf a dozen studies*" alluded to here were epidemiological studies that actually found that the statistical probability reported for a link between certain groups of vaccines (the Thimerosal-containing vaccines, and the measles and MMR vaccines) and autism was not above the " $p = 0.05$ " statistical significance level ("relative risk ≥ 2.0 ") that is *traditionally* used as the legal decision point for a probable factor-outcome link.

Second, this reviewer notes that more than a dozen less-conflicted epidemiological studies have found evidence of a statistically significant vaccine-autism link.

When properly reassessed and reviewed as a whole, the statistical directions of almost all of these peer-reviewed published epidemiological studies point to a link between the level of exposure to vaccine-derived Thimerosal and autism or, *though there are fewer studies*, a link between MMR vaccination and autism.

Additionally, several well-designed animal (pig, mouse, hamster and monkey) studies have shown that administering organic "ethyl mercury" compounds mercury poisons the animals and produces symptoms similar to those seen in autism and other developmental disorders even when the dosing schedules followed the "1999" birth-to-age-two-years U.S. national recommended vaccination schedule.

Furthermore, though there are other prior Vaccine Injury Compensation Program (VICP) cases where the petitioners prevailed and the child also had a disorder diagnosis in the autism spectrum, Hannah Poling v. Sec. Health and Human Services, 02-1466V, was the first VICP case in which, without any hearing of the evidence or testimony of the experts, U.S. government medical personnel conceded, in November of 2007, that Hannah Poling's 19-month vaccinations were a major cause of Hannah Poling's diagnosed autism and, in March of 2008, of her diagnosed seizure disorder.

Finally, this reviewer must note here that, for the communicable childhood diseases other than chickenpox, "those who spurn immunization" are actually those who tout vaccination.

This is the case because contracting the other communicable childhood diseases once generally provides assured "life-long" immunity ("immunization") to almost everyone who has them during childhood while, even with 2 to 4 doses, childhood vaccination programs only guarantee limited-duration immunity, at best, for some percentage of those who are vaccinated.

"The overwhelming consensus among scientists, he said, is that the benefits of vaccination greatly outweigh the risks."

Having neither seen nor participated in any general poll of U.S. scientists and failing to find any published peer-reviewed studies, *other than those by the vaccine makers and health officials and healthcare providers*, that establish that the lifetime benefits of vaccination outweigh the lifetime risks to those vaccinated for each vaccine component, this reviewer must consider this remark as but yet another instance of the unsupported historical hype of the benefits of vaccination.

Further, though not anti-vaccination per se, this reviewer must again note that most of today's recommended national vaccination programs for vaccines approved after the mid-1980s have, at best, questionable long-term safety records and are not even societally cost-effective much less medically cost-effective as they should have been proven to be before being recommended for national implementation.

Moreover, as long as:

- Writers, *like Ms. Boodman here*, continue to ignore the lack of: a) long-term proof of safety and b) medical cost-effectiveness, and
- Vaccine apologists, *like Dr. Offit*, hype the benefits of all vaccination programs even when peer-reviewed published studies have shown that some vaccines and/or vaccination programs are less than effective and/or not medically cost-effective (e.g., less-than-effective: the influenza vaccines and the influenza vaccination programs as well as the Merck RotaTeq vaccine and vaccination programs; and/or not-medically-cost-effective: all of the rotavirus vaccines, the HPV vaccines, the herpes varicella zoster vaccines, and the hepatitis B vaccines, and all the vaccination programs for these vaccines),

then this reviewer will continue to demand that there be:

- The requisite proofs of long-term safety and medical cost-effectiveness for each vaccine and national vaccination program,
- Long-term comparative studies of the overall health of the vaccinated group as compared to a matched never-vaccinated group, and
- Separate in-depth, long-term-study-supported statements as to:
 - The real risks and the incidence rate for each risk, and

- The possible benefits and the probability of each benefit for each vaccine and vaccination program

before this reviewer can support any statement lauding the theoretical benefits of any vaccine/vaccination program over the very real risks for that vaccine/vaccination program.

Thus, given the preceding realities and the published information currently available, this reviewer must conclude there is no validity to the statement attributed to Offit here.

“But that view is rejected by such anti-immunization groups as Vaccine Liberation and Citizens for Vaccine Choice. They claim the shots are harmful and urge parents to exercise their right to avoid them.”

First, this reviewer only notes that the writer’s “anti-immunization” clearly misstates the views of the groups, “*Vaccine Liberation and Citizens for Vaccine Choice*.”

This is the case because both stand for the proposition that all should be free to choose, or reject, each vaccination program without penalty or threat, as with any other preventive medical therapy.

Since vaccination carries real risks of harm, including death, for the vaccinees, and parents have: a) a recognized duty to protect their children, b) a vested interest in protecting their children, and c) a general right to decide the risks to which their children will be exposed, this reviewer notes that the writer’s second statement would have been less biased and more accurate had she written:

“Since vaccination carries some risk of harm, these groups ‘urge parents to exercise their right to’ choose which vaccines they will permit to be given to their children and when the vaccines they choose will be administered to their children.”

“Two weeks ago, a Northern Virginia-based group called the National Vaccine Information Center launched a campaign calling for ‘broad exemptions for medical, religious and conscientious belief reasons.’”

This reviewer finds that this writer’s statement appears to be accurate.

“According to Barbara Loe Fisher, the group’s co-founder, ‘forcing vaccination is a violation of human rights.’”

Here, this reviewer notes that the writer’s statement accurately reflects both Barbara Loe Fisher’s position and, apparently, the view on human medical rights embodied in the first article of the 1947 Nuremberg Code.³

³ <http://www.hhs.gov/ohrp/references/nurcode.htm>. “1. The voluntary consent of the human subject is absolutely essential.

This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, over-reaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved, as to enable him to make an understanding and enlightened decision. This latter element requires that, before the acceptance of an affirmative decision by the experimental subject, there should be made known to him the nature, duration, and purpose of the experiment; the method and means by which it is to be conducted; all inconveniences and hazards reasonably to be expected; and the effects upon his health or person, which may possibly come from his participation in the experiment.

The duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs or engages in the experiment. It is a personal duty and responsibility which may not be delegated to another with impunity.”

“Every state and the District grants medical exemptions to children who are allergic to components of vaccines or whose immune systems are too compromised to benefit from them. And all but two states -- West Virginia and Mississippi -- allow parents to opt out on religious grounds.”

While the writer’s remarks are accurate, they fail to note that all branches of the U.S. military also recognize medical and personal-belief-based religious exemptions.

“In some states, such as Maryland, parents need only sign a form claiming a religious exemption, while parents in Virginia and the District must submit a notarized statement.”

While the writer’s remarks are generally accurate, they fail to note that some states and local governmental agencies have adversarial procedures that make it difficult to impossible for some persons to obtain a religious exemption.

“In recent years lawmakers in 21 states, none of them local, have created ‘personal-belief’ or philosophical exemptions that permit children to skip vaccines on the grounds that they conflict with a parent’s views.”

While the writer’s remarks here may be accurate, they gloss over the reality that the trend is for the public health departments who administer these exemption programs to raise artificial barriers to the parents’ getting and maintaining a philosophical exemption.

For example, in Texas, the state health department requires:

- An original state form, not a copy, must be used,
- Parents must request copies of this form in writing and provide their children’s name and other information to get no more than 5 copies of the state form, and
- Parents must file a new form every year for each child,

in order for the parents to get and maintain a philosophical exemption.

Moreover, the writer fails to note: a) these “*personal-belief*” exemptions were enacted because the people of those states demanded them, or b) lobbyists for the healthcare providers and vaccine makers are currently engaged in tactics designed to not only add more vaccines to the state and/or local vaccination schedules but also to subvert the legislative process by allowing administrative “health departments” to decide which vaccines should be in the local vaccination program.

“‘Many states are making personal-belief exemptions easier,’ said Saad B. Omer, a vaccine researcher at the Johns Hopkins Bloomberg School of Public Health. ‘Filing for an exemption should at least be a function of conviction, not laziness.’”

This reviewer can only agree that the writer appears to be citing the personal views of Omer because this reviewer finds no evidence that states are making it easier for parents to get the “*personal-belief exemptions*” provided by law.

Moreover, Omer’s “*Filing for an exemption should at least be a function of conviction, not laziness*” flies in the face of the reality that, given the negatives that are associated with exemptions, the effort required to obtain them, and the fact that, if there were an outbreak, the parents must keep their children out of school and provide alternative care, the easiest course of action available to parents is to fully vaccinate their children as the locality mandates.

Thus, *in actuality*, a parent's opting for a philosophical exemption, where this exemption is available, *clearly reflects parental concern and not parental laziness*.

"In 2006, Omer and other vaccine researchers published a study in the Journal of the American Medical Association which examined rates of pertussis, or whooping cough, in states with personal-belief exemptions and those where nonmedical exemptions were easy to obtain.

http://www.washingtonpost.com/wp-dyn/content/article/2008/06/06/AR2008060603770_2.html?nav=rss_health&sid=ST2008060900952

They found that the incidence of the disease was about 50 percent higher in states with personal-belief exemptions than those without them and in jurisdictions where religious exemptions were easy to obtain than in those with more stringent requirements."

After carefully reading the article, "Omer SB, Pan WK, Halsey NA, Stokley S, Moulton LH, Navar AM, Pierce M, Salmon DA. Nonmedical exemptions to school immunization requirements: secular trends and association of state policies with pertussis incidence. *JAMA*. 2006 Oct 11; **296**(14): 1757-1763," this reviewer notes that, *except for the apparent increase in nonmedical exemption rates in states that allow both religious and personal-belief exemptions*, none of the other increases in exemption levels were statistically significant at even the $p = 0.05$ level and, *therefore*, most of these apparent changes may have occurred by chance.

Also, the article apparently did not adjust for the effect of the states' public education efforts concerning the availability of nonmedical exemptions.

Furthermore, this reviewer finds the researchers apparently made no attempt to take into consideration other effects, like geography, level of population in lower socio-economic groups, sanitation, and immigration rates, when considering the reported pertussis incidence rates even though these effects are known to be significant factors in the incidence of pertussis cases.

Finally, this reviewer notes that writer's statement:

"They found that the incidence of the disease was about 50 percent higher in states with personal-belief exemptions than those without them and in jurisdictions where religious exemptions were easy to obtain than in those with more stringent requirements"

was not reported in the cited paper and the statistical analysis of the data failed to find any statistically significant correlation between increased pertussis incidence and either: a) personal-belief exemptions or b) the ease of a parent's obtaining this exemption as compared to pertussis incidence in states with only a religious non-medical exemption.

"Researchers also found a substantial increase in personal-belief exemptions: the rate grew from 0.99 percent in 1999 in states that allow them to 2.5 percent in 2004."

This reviewer first notes that the writer has *improperly* reported the percentages for nonmedical exemptions in states that offer both religious and personal-belief exemptions ("The mean exemption rate" [for nonmedical exemptions] "increased an average of 6% per year, from 0.99% in 1991 to 2.54% in 2004, among states that offered personal belief exemptions.") as if they were percentage increases for personal-belief exemptions.

In addition, *up through 1998*, there was no apparent significant difference in the average percentage nonmedical exemptions' range (0.5 % to 1.5%) in states that had only a religious exemption compared to that range (0.5% to 1.6%) in states that had both religious and personal-belief exemptions (see "Figure 1" in the cited article).

Since the major increases appear to have occurred in the 1999 to 2004 period, some of the apparent increase may have been caused by other factors such as:

- The increased awareness of the epidemic increase in autism and other neuro-developmental disorders, childhood asthma and COPD, childhood obesity, childhood IDCM, and childhood gastrointestinal disorders beginning in the late 1990s and apparently still increasing, and/or
- Some parents' growing recognition that their children were being mercury poisoned by the organic mercury in the Thimerosal-preserved vaccines and other mercury-compound-preserved drugs approved without the requisite proofs of safety and given to their children, a recognition that was also growing in the same late-1990s-to-2004 timeframe.

"In Maryland, state statistics show that 1,300 kindergarteners, or 0.2 percent, were exempted on religious grounds in 2004, a rate that rose to 0.5 percent, or 2,500 children, in 2006."

Accepting the validity of: a) the levels reported and b) the characterization of the states religious-only nonmedical exemption as "easy" to obtain, this reviewer cannot help but note that, *based on the reported numbers*, the number of children in kindergarten apparently declined from about 650,000 in 2004 to about 500,000 in 2006 indicating that there may be other factors that may have biased these values.

Finally, given the increased awareness about the serious risks associated with vaccination and the presence of unnecessary highly toxic bioaccumulative poisons in some of them, this reviewer thinks that Omer and his fellow vaccine apologists should be happy that the percentage of children whose parents have elected a religious exemption was not higher in 2006.

"Parents who decide not to immunize, Omer noted, are making decisions for children other than their own."

Accepting the writer has accurately reported Omer's views here, Omer is apparently deliberately confusing the impact of a parent's decision with the decision itself.

Furthermore, while a parent's decision not to vaccinate his or her children may impact other children, it can only do so if the non-vaccinated child contracts a disease that his or her being vaccinated would have absolutely prevented.

Thus, *absent exposure and infection*, the parent's decision has no impact on other children and, *in cases of exposure and infection*, will most assuredly affect the parent's children, who will have the disease, much more than it may affect others' children.

Further, Omer or the writer is deliberately confusing the decision: to vaccinate (which is what the parent actually decides to do or not to do) with a possible but far from assured (for many vaccines) or an unlikely (for, *for example*, the varicella vaccine) outcome – his "*to immunize*."

In addition, the writer and/or Omer failed to note that vaccination with one of the current rotavirus vaccines, any of the measles-mumps-rubella vaccines, any of the current herpes varicella zoster vaccines or any other live-virus vaccine, like MedImmune's FluMist, also risks infecting those who are not inoculated because many of those who have been inoculated with a live virus can and do shed that live virus, or a mutated form thereof, for some period after being inoculated; and any who come into contact with these inoculees may also be infected.

Thus, *in his or her myopic pro-vaccination view*, Omer or the writer is blind to the reality that, *in many instances*, the parent's decision to vaccinate also risks infecting those who have not been vaccinated and/or those who have been vaccinated but do not have a protective level of immunity to the live disease organism or organisms in the live-virus vaccines.

Finally, since most parents elect to vaccinate and all the vaccinated children are not rigorously quarantined from all others for at least 21 days whenever a live-virus vaccine is administered, the writer should have also at least mentioned the fact that live-virus vaccinees can, and do, infect others who have not been vaccinated or, *though vaccinated*, do not have an effective level of immunity.

"No shot confers 100 percent immunity, and unvaccinated children can spread disease to those who are too young or too medically fragile to be immunized, including those suffering from cancer."

First, this reviewer notes that the writer's "*No shot confers 100 percent immunity*" is an explicit admission that vaccination does not assure immunity.

Second, the writer also fails to state that children vaccinated with live-virus vaccines also "*can spread disease to those who are too young or too medically fragile to be*" vaccinated as well as to others who, though vaccinated, lack adequate immunity.

After all, this secondary infection is the underlying reason the U.S. switched from the easy-to-give oral live-virus polio vaccine back to the injected inactivated-poliovirus vaccine in the 1990s.

Finally, this reviewer again notes that, as most vaccine apologists do, the writer uses the phrase "*to be immunized*" when the medically correct phrases are "*to be vaccinated*" or "*to be inoculated*" because: "*No shot confers 100 percent immunity*."

"Currently, Omer noted, a measles epidemic is unfolding in San Diego, where 64 cases of the disease have been reported. All but one of the affected children, he said, had not been vaccinated, some because they were too young for the shot, which is administered at about 12 months."

First, Omer is mistaken about the number of reported San-Diego-associated measles cases because, as of April 25, 2008, the end date for the most recent CDC report on measles cases in the United States of America, only twelve (12) cases have been reported to be associated with the San Diego outbreak (11 in San Diego proper and 1 who was exposed in San Diego but only found to have measles in Hawaii).^{4,5}

The "*64 cases*" number is for the entire United States for the period from 1 January 2009 to 25 April 2008.⁵

Limiting "*in San Diego*" to the City of San Diego, where the population is about

1,310,000⁶ (and not San Diego County where the population is about 3 million), 12 cases translates into an incidence rate of 12/1,310,000 or less than 1 case per 100,000 population.

Based on the actual data, there was definitely a measles outbreak in San Diego but, *presuming the threshold for a measles "epidemic" might be as low as 1 case in 10,000*

⁴ Outbreak of Measles — San Diego, California, January–February 2008. **MMWR** 2008 February 29; **57**(08): 203-206.

⁵ Measles — United States, January 1–April 25, 2008. **MMWR** 2008 May 9; **57**(18): 494-498.

⁶ http://sourcebook.sddt.com/Source/company.cfm?BusinessCategory_ID=21&Company_ID=2502.

residents because measles is a highly contagious disease, at least an additional 120 cases would need to have been reported in the same timeframe as the actual 12 cases were reported before the outbreak should have been called an epidemic.

Furthermore, the San Diego outbreak appears to have been contained even though one case did make it to Hawaii.

When those who are public health researchers either cannot properly report or are deliberately misreporting the facts about measles cases (or the cases of any other disease), then, as *this instance* does, their reporting only serves to further undermine the public's trust in public health officials, healthcare providers, vaccines, and the current recommended national and "mandated" "local" vaccination program.

Hopefully, the writer will at least correct the record here and resolve in the future to at least check the facts whenever the topic involves vaccines.

"A bill that would grant personal-belief exemptions has been introduced in New York, where Rita Palma and her husband have been battling school officials over a religious exemption for the youngest of her three sons. Palma, a Roman Catholic, said that in 2006, after several years of receiving signs from God, she decided not to take her son for the last of three required hepatitis B shots."

First, though the writer appears to be linking two issues – a legislative bill and two parents struggle to get a religious vaccination that New York State laws allows – this reviewer accepts that the writer's remarks are generally accurate here.

"'Vaccinations,' Palma said in an interview, 'are based on a very dark, threatening pessimistic principle' that if you do not inject your child, he will become sick or could die. 'To me, good health is earned through seeking God.'"

First, this reviewer accepts that the writer's quotations accurately reflect what Rita Palma said in some unreferenced interview.

However, this reviewer can only note that the writer's "*if you do not inject your child, he will become sick or could die*" appears to be the writer's understanding of what Rita Palma actually said.

"After a two-hour meeting informally known as a 'sincerity interview' -- attended by the Palmas, their lawyer and an attorney for the Bayport-Blue Point School District on Long Island -- school officials rejected the couple's request for a religious exemption. In a February 2007 letter they cited the couple's history of immunizing their children.

Palma ultimately took her son for the shot so he could attend school but has appealed the decision to the New York State Supreme Court.

'I'm furious about it,' she said. 'This is an absolute injustice.'"

Based on the preceding scenario, this reviewer must question the paper by Omer et al. (see "Figure 3" in the cited article) because it reports New York as a state where nonmedical exemption ease is "moderate" and the preceding scenario apparently indicates that religious exemptions, *the only nonmedical exemptions currently available to New York parents*, are difficult to obtain.

Since this case appears to be an intrusion of a "governmental body" on this couple's freedom to practice their religion as they see fit, it would seem that that the "sincerity

interview" violates the Constitutional guarantee of the freedom to hold religious views and to change those views as and when your religious beliefs direct you – after all, this reviewer knows of Catholics who were "pro-choice" and, *after events in their lives*, have become "pro-life," and vice versa.

Further, given the U.S. Constitution's apparent guarantees of religious freedom and the separation of religion and government, this reviewer thinks that no governmental agency has the right to deny these individuals their current religious views simply because they held some different views at some prior time.

"Fisher, of the vaccine information center, said she claimed a religious exemption to certain shots required in the District and later in Virginia for her daughter when she attended parochial schools.

Fisher said her older son had a bad reaction to a childhood vaccine, and 'I was very afraid that I would have another child this would happen to,' though her pediatrician recommended the girl be immunized.

'I prayed about whether God wanted me to do what this physician wanted me to do,' she recalled. After a three-hour meeting, she said, her Lutheran pastor signed a statement in support of her exemption. 'He said he didn't have to agree with me but that I had a sincere religious belief.' School officials accepted it, she said.

Although she is aware that some parents might manufacture religious objections, Fisher said she doesn't recommend it. 'If you are going to take a religious exemption, you have to have a sincere belief and be true to the spirit and intent of religious exemption,' she said."

In general, this reviewer accepts the accuracy of the quotes and the validity of the writer's remarks with respect to Barbara Loe Fisher's religious beliefs and actions.

Since the District of Columbia (DC) and Virginia both honored her request for a religious exemption for her daughter, this reviewer would agree with "easy" label given to Virginia for the ease of obtaining a nonmedical exemption from vaccination by Omer et. al. and would suggest that getting a religious exemption from vaccination in DC may also be easy – even though it had no ranking in the paper by Omer et al.

Finally, this reviewer must again object to the misuse of the word "*immunized*" in the writer's "*though her pediatrician recommended the girl be immunized*" because administering vaccines to a child (which vaccinates or inoculates that child) cannot be guaranteed to immunize that child.

"Maryland officials say they are watching immunization trends. Ed Hirshhorn, chief of the state's Vaccines for Children program, said that although he thinks the religious exemption requirement is 'too easy,' officials are reluctant to seek stronger requirements in the absence of an outbreak of disease or dramatic increase in parental refusal.

'You're always opening Pandora's box,' he said."

Except for the continuing misuse of "*immunization*" when the correct word is "vaccination" or, less commonly, "inoculation," this reviewer accepts that the writer's remarks reflect Ed Hirshhorn's thinking.

In addition, though this reviewer does not agree that Maryland's "*religious exemption requirement is 'too easy,'*" this reviewer thinks that seeking stronger requirements would only serve to push the parents to demand that the current legal "conditional opt out" vaccination statutes be replaced by "opt-in" statutes modeled after those that have

led Japan to currently have: a) an infant mortality rate that is less than half the U.S. infant mortality rate and b) a longer life expectancy.

Furthermore, this reviewer finds the article's title, "**VACCINATIONS Faith Lets Some Kids Skip Shots**," to be misleading because the article actually addresses current state vaccination exemption laws and practices for nonmedical exemptions, and parental choices from the perspective of the pro-vaccine apologists regarding: a) the status quo and b) trends regarding the vaccination of children in the U.S. today.

Finally, this reviewer would suggest that the writer research the trends in the percentages of medical exemptions in the U.S. to see if they too are increasing as well as to discover the reasons for the trends in medical exemptions, whatever they are.

"Comments: boodmans@washpost.com."

If anyone is interested in learning more about this reviewer's views and their basis, then the articles that are posted in the "Documents" section of the CoMeD website, <http://www.mercury-freedrugs.org>, should provide the information and the supporting references from which this reviewer has derived his understanding of U.S-approved vaccines and the various U.S.-recommended vaccination programs. [Note: This reviewer's CV can be found at: <http://www.dr-king.com>.]

Postscript:

On 21 June 2008, this reviewer finished studying a just-released Congressional report, "**DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION REPORT TO CONGRESS ON VACCINE SAFETY DATALINK House Appropriations Committee**,"⁷ which, among other things, confirmed that the CDC's late-1990s and early-2000s epidemiological studies, including the iterations published by Verstraeten et al. in 2003, were problematic and significantly flawed.

Finally, this reviewer suggests that the interested researcher carefully study all of the more recent (2007 – 2008) peer-reviewed papers published in any journal that provide evidence pro and concerning the probable links between vaccination (currently: a) Thimerosal in vaccines preceding or given with measles or MMR, b) Thimerosal in Thimerosal-preserved vaccines, c) too many vaccines at once [a "Thimerosal as a causal factor" case that government medical experts conceded as a "vaccinations as a causal factor" case], and d) vaccination too soon [based on the outcomes in a 2-month-delayed DTaP inoculation study and the increase in teratogenic effects (severe birth defects) reported in Appendices "4" and "5" in a 1977 book⁸ for children born to 2,200+ mothers given a Thimerosal-preserved flu shot during pregnancy in the late 1950s and early 1960s].

⁷ <http://evidenceofharm.com/VaccineDataLinkReporttoCongressFinal.pdf>

⁸ Heinonen OP, Slone D, Shapiro S. BIRTH DEFECTS AND DRUGS IN PREGNANCY 1977 (John Wright - PSG Inc, 545 Great Road, Littleton Mass 01460, USA., John Wright & Sons Ltd, 42-44 Triangle West, Bristol BS8 1EX, England – printings: 1977, 1977, 1978, 1982.