DIPHTHERIA By Dennis Wilson January 8, 2012

I was reading an issue of *The Eau Claire Journal*, a monthly newspaper and my eye was drawn to an article called "Vaccination: Not as simple of a Decision as it Seems." The author says "A battle is raging throughout the United States and Great Britain over the widespread use of multiple vaccines in children. Both sides tend to present what they deem a clear-cut case either in support of or opposition to vaccines." Apparently many parents feel the risks of vaccination are too great, and so they refuse to get them for their children, especially the Diphtheria, tetanus, and A cellular pertussis vaccine (DTAP). Perhaps they need a trip back in time to compare the small risks of vaccination with the consequences of one of the actual diseases.

Diphtheria is caused by toxin-producing strains of the gram-positive bacillus Corynebacterium diphtheriae. In the past it was known as the "strangling angel of children." because most victims were children between the ages of two and ten. The signs and symptoms of respiratory diphtheria are caused by the bacterium's ability to cause a localized inflammatory reaction of the cells lining the upper respiratory tract. It is transmitted by respiratory droplets or direct contact. After a two to five day incubation period the victim develops a sore throat, hoarseness, weakness, and eventually great difficulty swallowing and breathing due to swelling (bull neck) of the lymph glands and a grey membrane that covers the inner lining of the throat. If left untreated death comes due to suffocation. If one survives the heart or nervous system may be damaged. The fatality rate for children can be as high as 20 percent.



A Child dying of Diphtheria

No effective treatment was know until the 1880's when American physician Joseph O'Dwyer developed the method of inserting tubes into the throat to prevent suffocation. In the 1890s, the German physician Emil von Behring developed an antitoxin that did not kill the bacterium, but neutralized the toxic poisons the bacterium releases into the body. Behring received the first Nobel Prize in Medicine for his work. In 1913 Behring developed the first effective vaccine.

Parents before 1890, and often after, had to watch as their children swelled and suffocated. Children suffered and died at home then. One mother described the experience thus: "Our little Rolin's throat was badly cankered, he could no longer lie down without strangling; and we felt that by naught but the power and mercy of God, could he be spared to us. With a sad, aching heart, I laid away his little playthings, thinking I might never see him use them again; and as I looked over to the cemetery on the hill beyond us, a great yearning cry of anguish went up from my soul, as I thought that, in all human probability, I might be called within a few days, to there lay away the form of my darling. While I sat with Rolin in my arms, he (her husband) knelt and prayed. As he plead with God that, if it were according to His will and for His glory, He would spare and heal the child He had given us."

Another mother wrote: "He seemed to have a sense of his situation, or at least often expressed himself suitably to the result. In the early part of his sickness which was that terrible disease, the diphtheria, he several times said, "Eddy can't get better now," "Eddy can't get well," and continued to say so at times. Twice said he was "happy," and his quiet, patient demeanor evidenced it, even when for the last sixteen hours he could not see at all. He remained entirely sensible to the last, and when asked if he was going away to leave father and mother, he said, "Yes," took my hand in both his to keep me near him, and when the last dread struggle came, he piteously called, "Mother," then the sweet voice was hushed." These scenes of torment were not uncommon in any community you might name. You will see below the death records of three children from Grant County, ages 3, 5, and 7, all taken by Diphtheria.

00%	n of Deaths	
Sand Catalla F.	nch Charles & Bell	02930
Mut.	makes orcket	Sarah Jane Be
Timale	Male	Mute
Su		Female
George French	War & Bell	Wim H. Bell
Mary J. ".	Manj a	
1	mury a	Many Ju
Potosi Wis	Brice Court Gard	C. Beice Con Grant
4-17	- Jewe order Orani	e. Weice Or, Brand
		17
aug 1. 1875 Nov 14, 1	880 Sent 1878 ()	80 ay 5, 1873, De 23 1
Diptheux:	Dipthent 1	(124/
Potosi Grant Cour	to Peter Ana 10	of Polosi Grant Co
Potori Protestant	4	
Lorow Wade	Can II y 11 9	4 4 4
No therille Mis		
12 Mch - 1881		
12 1001	24 moh 1881.	24, mich 1881

In November of 1879 the Platteville Normal School was closed after the daughter of a janitor died in the building. The Boston Health Department in 1880 published a tract about caring for the Diphtheria sufferer. They said it was highly contagious, and cautioned "the sick person should be placed in a room apart from the other inmates of the house, and should be nursed, as far as possible, by one person only." This, of course was a crude attempt at quarantine, most often ineffective for the other children in the family were very likely to fall ill as well. In Minnesota, "every house where the disease exhibited was labeled "DIPHTHERIA" and no communication with the inmates permitted, except through proper officers." In November of 1879 a family at Nekimi, near Oshkosh was visited by the "strangling angel." Farmer Samuel Orr's household consisted of his wife, himself, and ten children. On the 11th, the oldest girl became ill. She died in a few days and by the following week the father, mother, and six of the remaining children were sick with the disease. Five more children died. The parents lived. The Daily Northwestern reported; "all medical aid was without avail. It was impossible to save them." The Janesville Gazette of January 29th 1881 reported: "A prominent citizen of Iowa has sent to Wisconsin a remedy which he says has wrought wonderful cures in portions of the former state where the disease has extensively prevailed. It is this:

DIPHTHERIA WASH

Golden Seal, pulverized 1 drachm
Borax, pulverized 1 drachm
Black pepper, pulverized 1 drachm
Alum, pulverized 1 drachm
Nitrate potash, pulverized 1 drachm
Salt, pulverized 1 "
Mix in cup half filled with boiling water and add vinegar to fill

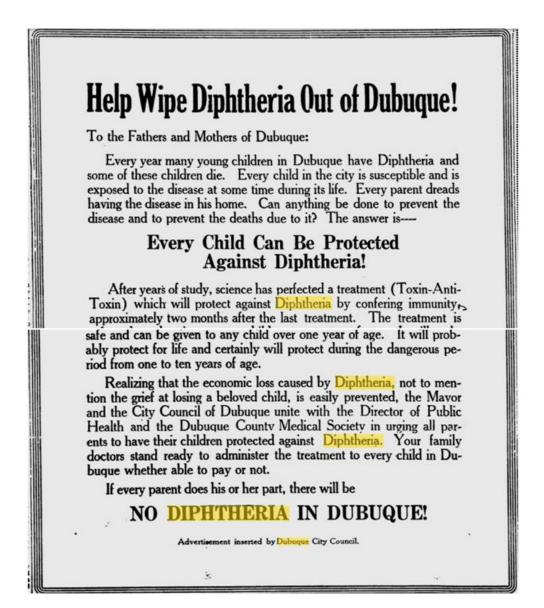
The writer added: "we give you this remedy for what it is worth." It was of course worthless.

There were then as now those who did not believe in medical treatment, most notably Christian Scientists, and many reports of death with only the application of prayer were published. In 1891 a John Doan of Springville Iowa had one of his three children taken ill with Diphtheria. He called a doctor but sent him away, calling instead two old women from Anamosa for a "faith cure." All three children died, and lynching was discussed in the community. The parents left town at midnight and were not heard of again. As late as 1921 a total of 206,000 cases and 15,520 deaths were reported in the United States. In 1982, a nine-year-old girl contracted diphtheria at a Christian Science camp in Colorado. She then traveled on a bus with many other unvaccinated children to Wisconsin where she died.



These types of stories have been reported in each generation since. The means of prevention is at hand but some parents believe that their children's "natural immunity" should be allowed to develop without vaccinations. Others have heard that autism and a whole list of other chronic illnesses are caused by vaccination. These stories do not have sound scientific backing. Ignorance and misinformation has condemned children to death over and over again. Who would want to experience the sorrows

shown above? We may if enough people refuse to have their children vaccinated.



Diphtheria eradication advertisement Dubuqu Iowa 1926

For further reading you might wish to consider:

"A Prayer for the Dying" by Stewart O'Nan (2000) a novel set in Friendship, WI.

"Deadly Choices-How the Anti-Vaccine Movement Threatens Us All" by Paul A. Offit (2011)