

Halachic Aspects of Vaccinations

Edward Reichman, MD*

www.bikurcholim.net

Perhaps it is because we live in twenty-first century America, a country largely immune from true epidemics, that we take vaccination for granted and some parents even consider not vaccinating their children. A Jew living in the eighteenth century would have longed for respite from the relentless onslaught of diseases, and could only have dreamed of having a way to prevent them. The thought of refusing vaccinations would never have entered his mind. Unfortunately, nowadays, as a result of misleading information, some parents are confused about the issue and do not realize the importance of vaccinations. A cursory review of the origins of vaccination in medical and rabbinical literature may provide some perspective on the issue.

In the late eighteenth century, smallpox decimated the population of Europe. Millions of people died from the disease, and a high percentage of children were afflicted. In the eighteenth century alone, an estimated 400,000 Europeans died each year. When potential relief from the horrors of the disease came on the horizon, there must have been unabashed excitement. The cure, or, more accurately, the mechanism of disease prevention, however, was unique in the history of medicine: it required exposing healthy individuals to disease, hopefully a mild form, in order to prevent the development of a more serious disease. The procedure involved the removal of fluid from the pox of an afflicted patient, and the subsequent injection of that virulent fluid into the body of a healthy individual. Scientists believed that the healthy person injected with the fluid would develop a mild, non-fatal form of smallpox, and would therefore be spared the likelihood of fatality if later exposed to the spontaneous form. This was indeed the case the majority of the time, but the procedure was not without risk; some of those inoculated developed the severe form of the disease, and died as a result (an estimated 0.5 to 2 percent). In fact, there is a tombstone in Long Island, New York, with the following epitaph:

In Memory of Peleg,

Son of Thomas and Mary Conklin, who died of the smallpox inoculation

Jan. 27th, 1788, aged 17 years

In 1785, Rabbi Avraham ben Shlomo Nansich published a small pamphlet entitled “Aleh Terufah,” detailing the tragic loss of two of his children to smallpox and beseeching the rabbis of his generation to allow inoculation.

However, the treatment was considered controversial at the time, as never in the history of mankind had one taken a healthy individual and injected him with the very cause of an illness, even if the objective was to prevent a more severe disease. This unique treatment posed a dilemma for the Torah-observant Jew. The Torah gives license to the physician to heal the sick, but does it give him license to bestow illness upon the healthy, albeit for an ultimate cure? The debate about the medical and theological aspects of smallpox inoculation occupied a significant chapter in eighteenth- and nineteenth-century history.

Rabbis of that time debated the issues and were well aware of the risks associated with vaccination. Rabbi Israel Lifschutz, author of the Tiferet Yisrael commentary on the Mishnah, argued in favor of inoculation despite its known risks. In his view, the benefits clearly exceeded the risks. Other prominent rabbis advocated vaccination as well, including Rabbi Mordechai Banet (1753-1829), Rabbi Eliezer Fleckeles (1754-1826) and Rabbi Ishmael HaKohen (1723-1811).

An additional halachic issue arose with regard to the practical dissemination of the inoculation. In the early days of inoculation, the injections were performed by barber-surgeons, who traveled from town to town. They often spent only a few hours in each location. The question therefore arose as to whether one could receive the inoculation on Shabbat, if that happened to be the only time it was offered. The halachic discussions touched on two issues. The first issue related to the exact nature of the prohibition associated with the injection. Halachic distinctions were drawn between injections made under the skin (subcutaneous), as opposed to those made directly into the vein (intravenous). The second, more fundamental, issue was the determination of the halachic status of the healthy patient receiving the injection. The violation of Shabbat is permitted only for patients who are technically considered ill, and the level of violation allowed is commensurate with the severity of the illness. While patients in need of receiving inoculation are not technically ill, the debate was whether they should nonetheless be considered in the halachic category of a “choleh she’ain bo sakanah” (one experiencing a non-life-threatening illness), by virtue of their presence in an endemic area of life-threatening disease (see, for example, Teshuvah Meahavah 1:134; Zecher Yehosaf, OC 104; Shu”t Vela’asher Amar 15). This categorization of the patient would allow the violation of some prohibitions in the provision of treatment. If the patient receiving the inoculation was not ascribed this status, no Shabbat violation would be permitted. After much deliberation, a number of posekim allowed the inoculation of healthy individuals on Shabbat, which entailed possible Shabbat violation, in order to protect them from exposure to smallpox. The Torah gives license to the physician to heal the sick, but does it give him license to bestow illness upon the healthy, albeit for an ultimate cure?

The more crude inoculation for smallpox was soon replaced with the scientifically tested vaccination of Edward Jenner, which inoculated patients with the cowpox virus in order to protect them from smallpox. More than 200 years have passed since Jenner’s discovery, and the effectiveness of vaccination is now beyond question. In fact, the discovery of vaccination is on virtually every top ten list of the greatest discoveries in the history of medicine, appearing as number one on many of them. While there is no way to know how many lives have been saved globally as a result of vaccinations for diseases such as smallpox, diphtheria, measles, polio, pneumococcus and influenza, tens of millions would be a very conservative estimate. Indeed, smallpox, the first disease for which vaccination was used, has been virtually eradicated from the face of the earth.

However, while the side effects of vaccinations—including death—are rare, they are also well documented. Despite these foreseen consequences, scientific research has proven that the risk-benefit analysis weighs very heavily in favor of vaccination. The side effects must be viewed in the context of general medical practice. The issue of assuming risk and self-endangerment is the substance of many halachic discussions, but the assumption of some risk in the pursuit of medical treatment is an accepted fact. There is arguably not a single form of treatment, from Tylenol to chemotherapy, which is free of side effects—many of them serious. Yet the obligation to seek a cure and prevent disease remains in full force, despite the risks. To be sure, each treatment requires its own risk-benefit statistical analysis.

Anecdotal accounts of vaccinations leading to other conditions, such as autism, do exist. But these are not well-documented, scientifically proven side effects. To date, these claims have not been substantiated by rigorous scientific study. In 2004, the Institute of Medicine performed a thorough study on the hypothesis that vaccines, and, in particular, the mercury they contained, were causally related to autism. Its published findings, entitled “Immunization Safety Review: Vaccines and Autism,” concluded that the body of epidemiological evidence rejects a causal relationship between mercurial-containing vaccines and autism.

The web site of the Centers for Disease Control and Prevention (CDC) states, “Carefully performed scientific studies have found no relationship between MMR [measles, mumps and rubella] vaccine and autism.” The final blow to the autism-vaccination theory was dealt by the *Lancet* in its February, 2010 issue, when it decided to “fully retract from the published record” the original 1998 paper by Dr. Wakefield that initially suggested a link. Such a retraction is almost unprecedented and reflects a decisive negation of the theory.

Furthermore, unvaccinated individuals expose themselves to additional risk for vaccine-associated diseases. It is often claimed, however, that their risk is low due to herd immunity, a type of immunity that occurs when the vaccination of a large portion of a population (or herd) provides protection to unvaccinated individuals. Herd immunity theory proposes that, in diseases passed from person to person, it is more difficult to maintain a chain of infection when large numbers of a population are immune. The more immune individuals present in a population, the lower the likelihood that a susceptible person will come into contact with someone who is infected. Thus, since most of the people in a community are vaccinated against diseases, it is less likely that viruses or bacteria will flourish there and therefore less likely for an unvaccinated individual to contract these diseases. While this argument is not without merit, the fewer people who get vaccinated, the less protective herd immunity will be.

However, there is another factor to consider. Even among those who are vaccinated, small percentages do not achieve immunity. So if unvaccinated individuals contract a disease, they can spread it to this population. Furthermore, if the number of unvaccinated individuals rises, the possibility of epidemic outbreaks exists—reminiscent of the pre-Jenner days. The recent outbreaks of measles attest to this fact. From January 1, 2008 through April 25, 2008, the CDC received a total of sixty-four reports of confirmed measles cases in nine states, the highest number for the same time period since 2001. Of the sixty-four people infected by the measles virus, only one had documentation of prior vaccination. Many of the cases occurred in children who were too young to be vaccinated or whose parents claimed exemption from vaccination due to religious or personal beliefs.¹ One particular case affected the Jewish community in Cedarhurst, New York, just a few blocks from my home.²

Therefore, it is not only a personal decision to refuse vaccination; it is a decision that affects the entire community. It is thus within the Jewish community’s rights to mandate vaccination, for example, as a prerequisite for day school admission.

One might argue that the assumption of risk for treatment of an existing medical condition is different from assuming risk for preventative care, but even preventative care is considered a mitzvah. When global epidemics of infectious disease were more prevalent, posekim were more willing to allow vaccination on Shabbat. But even today, in unique circumstances, posekim have permitted the violation of Shabbat for the preventative procedure of vaccination. For example, Rabbi Shlomo Zalman Auerbach allowed vaccination on Shabbat in the following limited scenario: If one did not receive the vaccination on Shabbat, and it would be a number of years before he would have that opportunity again.³ Rabbi Eliezer Waldenberg permitted a vaccine for tetanus to be given on Shabbat.⁴ While these cases are limited, they reflect the fact that posekim regarded vaccination, though a preventative measure, as enough of an obligation to consider violating Shabbat.

In the exceedingly rare cases of fatality possibly associated with vaccination, posekim have addressed the issue of the permissibility of autopsies in order to clarify the cause of death and to perhaps prevent other deaths. Rabbi Dr. Mordechai Halperin, the director of The Dr. Falk Schlesinger Institute for Medical-Halachic Research in Jerusalem and the chief officer of medical ethics for the Israeli Ministry of Health, recounts a 1992 case of an infant in Israel who died shortly after receiving a hepatitis vaccination. The Israeli Ministry of Health requested an autopsy of the infant, and Rabbi Halperin discussed the halachot of the case with Rabbi Auerbach, who “gave an unambiguous decision that the postmortem should be carried out on account of the dangers although, and he stressed this, it was clear to him that the danger

was remote.”⁵ However, Rabbi Yosef Shalom Elyashiv prohibited an autopsy in a similar case involving an infant who died after receiving a vaccination. He made his decision partly because the odds of the death being a result of the vaccine were small, coupled with the fact that it was unlikely that the autopsy would produce useful results.⁶

To be sure, there are certain patients for whom vaccinations are medically inadvisable, but such cases are exceptions and each should be discussed individually with a physician. To forgo vaccination purely because of anecdotal claims is halachically irresponsible.

Our success with vaccinations is the cause for our complacency. We in the twenty-first century have forgotten what the lives of our ancestors were like—filled with sadness for the children afflicted with paralysis from polio and with mourning for children dying of smallpox and measles. These occurrences are, fortunately, a thing of the past, due largely to the success of vaccination. May Hashem allow us to continue our success in the battle against infectious diseases.

*Dr. Reichman is an associate professor of emergency medicine and an associate professor of philosophy and history of medicine at the Albert Einstein College of Medicine of Yeshiva University. He received his semichah from the Rabbi Isaac Elchanan Theological Seminary. He writes and lectures widely in the field of Jewish medical ethics.

2/29/12 for Bikur Cholim, Los Angeles, CA. Originally published for Jewish Action/Orthodox Union

Notes

1. Information from <http://www.cdc.gov/Features/MeaslesUpdate/>
2. “Health Officials Issue Measles Advisories in New York City, Long Island,” Associated Press, 8 April 2008, accessed at http://www.nydailynews.com/ny_local/2008/04/08/2008-04-08_health_officials_issue_measles_advisorie.html
3. Minchat Shlomo 2:29, letter dalet; Shemirat Shabbat Kehilchatah, chap. 32, n. 2
4. “Vaccination for Tetanus on Shabbat” (Hebrew), Halachah U’Refuah 4 (Regensburg Institute, 5745): 179-180. In the next volume, Dr. David Applebaum takes issue with Rabbi Waldenberg’s permissive ruling and claims that since in this case the tetanus shot could be given after Shabbat, and would provide the same immunity, perhaps Shabbat violation would not be necessary.
5. Mordechai Halperin, “The Laws of Saving Lives: The Teachings of Rabbi S. Z. Auerbach,” Jewish Medical Ethics 3:1 (January 1997): 44-49, esp. 46-47
6. A. Steinberg, “Autopsy in the Case of Death After Vaccination” (Hebrew) Assia 59-60 (June 1997): 129-132

For Further Reading

1. Avraham ben Shlomo Nansich, Aleh Terufah (London, 1785): 545
2. On the history of the rabbinic response to smallpox inoculation, see, for example, Rabbi Pinchas Eliyahu Hurwitz, Sefer HaBrit (Jerusalem, 5750), 247ff.; H. J. Zimmels, Magicians, Theologians, and Doctors (London, 1952), 107-110; D. Margalit, “Smallpox Inoculation Before Jenner” (Hebrew), Derech Yisrael b’Refuah (Jerusalem, 5730): 376-379; David Ruderman, “Some Jewish Responses to Smallpox Prevention in the Late Eighteenth and Early Nineteenth Centuries: A New Perspective on the Modernization of European Jewry,” Aleph 2 (2002): 111-144.
3. On the general risk of medical procedures (including the application of the principle of “shomer p’taim Hashem, God watches over the simpleton”) see Rabbi J. David Bleich, “Hazardous Medical Procedures,” Bioethical Dilemmas 2 (Southfield, MI, 2006): 239-275; David Shabtai and Raymond Sultan, “Metzitzah b’Peh: Paradigm for Halachic Risk Taking,” Jewish Medical Ethics 6:1 (December 2007): 26-48.

4. For a detailed analysis of the halachic aspects of vaccination, see Daniel Eisenberg, "The Ethics of Smallpox Vaccination," at http://www.aish.com/societyWork/sciencenature/The_Ethics_of_Smallpox_Immunization.asp.
5. For a discussion on the liability of the physician and the government for damages incurred during vaccination, see Yigal Shafran, "Halakhic Attitudes Toward Immunization," *Tradition* 26:1 (Fall 1991): 4-13
6. For a discussion on halachic aspects of preventative medicine, including vaccination, see James DiPoce and Shalom Buchbinder, "Preventative Medicine," *Journal of Halacha and Contemporary Society* 42 (Fall 2001): 70-101.
7. For a discussion on the permissibility of autopsy after death from vaccination, see Mordechai Halperin, "The Laws of Saving Lives: The Teachings of Rabbi S. Z. Auerbach," *Jewish Medical Ethics* 3:1 (January 1997): 44-49, esp. 46-47 and A. Steinberg, "Autopsy in the Case of Death After Vaccination" (Hebrew), *Assia* 59-60 (June 1997): 129-132.
8. Some invoke the principle of "shomer p'taim Hashem" as a possible reason to refrain from vaccinating (see, for example, Rabbi Shlomo Zalman Auerbach, *Minchat Shlomo* 2:29, letter dalet). On the application of this principle in halachah, see Rabbi Shlomo Kohen Duras, "Shomer P'taim Hashem," *Techumin* 24 (5764): 445-454; the statement of the Rabbinical Council of America on smoking available at <http://www.rabbis.org/news/article.cfm?id=100808>; Rabbi J. David Bleich, "Hazardous Procedures," *op. cit.*; Shabtai and Sultan, *op. cit.* One could also apply the principle "tamim tihiyeh im Hashem Elokecha." Rabbi Moshe Feinstein entertains the application of this principle as a basis for refraining from genetic testing for Tay-Sachs disease, but quickly rejects it citing how simple and effective genetic testing is to prevent the birth of a diseased child. Likewise, in the case of vaccination, the procedure is simple and the effectiveness is unquestioned. There is the aspect of risk, which is addressed above.
9. For a comprehensive review of the medical literature on the side effects of vaccines as well as on the association between vaccination and autism, see the Centers for Disease Control web site (www.cdc.gov).