

The Mandate of Genetic Testing

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According to our *mesorah* (tradition), *HaKadosh Baruch Hu histakel b'oraita u'bara alma*—G-d looked into the text of the Torah and created the world.² In essence, the Torah is the divine architectural blueprint for the creation of the world. I would submit that the converse is true for man. *Adam*, man, *histakel b'alma u'bara oraita*. When man delves into the workings of the world through the study of medicine and science, he brings the Torah to life and gains an appreciation of *HaKadosh Baruch Hu's* role in the creation of the world. In essence, DNA and the genetic code is the blueprint for the human being, which gives us the wisdom to appreciate G-d's creation. Just as we find secret codes in the arrangements of the 22 letters of the Hebrew alphabet in the Torah, we discover genetic codes with the handful of letters that comprise the nitrogen base building blocks of DNA.

Medicine is replete with military metaphors—we speak of the therapeutic “arsenal” or “armamentarium,” we fight the “war” on cancer and “battle” other diseases, as we continually seek the “magic bullet.” The Torah also utilizes a military metaphor in what Rav Soloveitchik considered man's mandate to harness nature for the good of man: “*u'milu et haartetz v'kivshuha*,”³ fill the earth and conquer, or subdue it. In what is the consummate fulfillment of this directive, man has been able to identify the genetics of certain diseases and literally conquer and begin to vanquish them.

We live in an age where alarmists have labeled the challenges people are experiencing in identifying suitable matches as the “shidduch crisis.” This label has appropriately led to the rallying of many well-meaning people attempting to alleviate the crisis in creative and novel ways. Yet there is one aspect of shidduchim that everyone should treat with concern: genetic testing. Genetic testing, accomplished through a simple blood test, is a safe and effective way of identifying the possibility of couples having children with a variety of severe and sometimes fatal

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² For an explanation of this concept, see R' Chaim of Brisk's commentary to Shemot 13:4.

³ Bereishit 1:28.

diseases. The student-led YU Medical Ethics Society of Yeshiva University's Center for the Jewish Future offers testing annually for the student body on both undergraduate campuses, and the testing is now under the auspices of the newly formed Program for Jewish Genetic Health at Einstein.

Genetic testing is not a purely medical/scientific issue. It has halachic and hashkafic ramifications. The Talmud already acknowledges concern over the transmission of disease to future progeny in advising one to not marry into a family of epileptics or lepers, assuming these conditions were heritable.⁴

Just as a rabbi is charged with educating his congregation about the halachic permissibility of violating Shabbat in the face of *pikuach nefesh*, so he is now equally obligated to inform his congregation of the availability of genetic testing, which can prevent disease in children and unimaginable anguish for parents. One may think that perhaps one should not second guess *Hakadosh Baruch Hu*, and if it is G-d's will that one bear children with genetic disease, so be it. This appropriate theological question was asked and answered by Rav Moshe Feinstein zt"l some 40 years ago when Tay-Sachs testing was first offered. Rav Moshe clearly articulated the position that testing should be done, as it can easily be performed and can potentially spare the anguish of parents who are at risk to bear children with genetic diseases.⁵ One need only spend five minutes with the parent of a Tay-Sachs child to appreciate the veracity of these words.

We have moved well beyond the identification of this one disease to a time when many diseases can be tested for—including tests for genes that will certainly cause disease, some possibly, some fatal, some not. The genetic landscape is admittedly complex and evolving, and questions raised by genetic testing are manifold:⁶ who to test, how to test, what to test, and when to test, but not, IF to test—as test we must. We still debate whether to test in a closed, anonymous fashion, as per the Dor Yesharim model, or in an open format. Studies are in process now to assess the impact of both. In either case, the ever-expanding mandate of *verapo yerapei* (you shall surely heal)⁷ surely includes genetic testing in its purview, and its scope continues to widen as we identify more causes of disease. It is clear that man is privy to these Divine genetic secrets for a reason.

The details are debated by poskim and much halachic discussion is proceeding and will ensue in the coming years. The answers to the questions will not be unanimous, but they derive from the *mesorah*, and there is simply no other way for a Torah observant Jew to deal with the abundance of information and its potential halachic ramifications. Moving forward, we as a community will need to form clearer guidelines.

⁴ *Yevamot* 64b.

⁵ *Igrot Moshe* E. H. 4:10.

⁶ See F. Rosner, "Judaism, Genetic Screening and Genetic Therapy," *Mount Sinai Journal of Medicine* 65:5-6 (October-November, 1998), 406-413; R' J. D. Bleich, "Genetic Screening," *Tradition* 34:1 (Spring 2000), 63-87.

⁷ *Shemot* 21:19.

Which genetic conditions rise to the threshold of disclosure?⁸ When and if should conditions be disclosed to one's children? Should third parties, either medical or non-medical, share unsolicited genetic information? If a couple is already married and are found to be carriers for genetic conditions, can they perform prenatal testing?⁹ If yes, can they act on the results? Can they avail themselves of pre-implantation genetic diagnosis? Some of these questions have also been asked and answered in the last generation, but the analyses need to be revisited and updated in light of new scientific advances.

One of the more challenging questions is when in the courtship should genetic conditions be divulged? While there is no magic formula, too early disclosure can unnecessarily sabotage a potentially wonderful relationship, while too late disclosure, when engagement is imminent or past, may cause undue stress. Disclosure of genetic information does not in itself assume the seriousness or advanced stage of the relationship, but rather is an important precautionary measure to prevent unnecessary psychological harm to the involved parties.

The poskim of our generation are addressing these issues and the *piskei halachah* continue to evolve with the accumulation of scientific and psychological data. It is not the mere acquisition of knowledge that constitutes a fulfillment of "fill the land and subdue it," but a judicious application of this knowledge to better serve the world and its inhabitants. Some have considered this vast amount of complex information to have generated a so-called tyranny of knowledge. There is much merit to this notion. But the tyranny of ignorance may be a worse fate.

⁸ On issues of disclosure in shidduchim, including which diseases to disclose, and who can or must disclose, see A. Dori, "Disclosure of medical conditions in shidduchim," *Assia* 87-88 (*Sivan*, 5770) (Hebrew), Y. Steinberg, "Disclosure of medical information to a potential spouse," in Y. Steinberg, ed., *Brachah L'Avraham* (Jerusalem, 5768), 341-362 (Hebrew). R' Yitzchak Zilberstein devotes some 80 pages to issues of disclosure and shidduchim, including specific genetic diseases, in his new *sefer*, *Shiurei Torah L'Rofim* (*Tevet*, 5772).

⁹ The two extreme positions on prenatal testing and subsequent abortion are espoused by Rav Moshe Feinstein in *Igrot Moshe* C. M. 2:71 and Rav Eliezer Waldenberg in *Tzitz Eliezer* 13:102. For a comprehensive analysis on halakhic aspects of abortion, see R' J. D. Bleich, "Abortion in Halakhic Literature," *Contemporary Halakhic Problems* (Ktav, 1977), 325-371.



To the students of Yeshiva University,

We believe that all students should undergo genetic testing before marriage, preferably before dating or entering into a serious relationship. Testing aids in diminishing pain and suffering in Klal Yisroel. Please take advantage of the opportunities afforded to you at the Yeshiva. Should you have any questions regarding the results of a test, please feel free to speak to your local posek and a trained genetic counselor.

Tizku Lemitzvot,

יונה ר'ס
אליהו/ק-מת
יוסף גלאן
מאיר בולצניק

יצחק צבי בשרני כהן
אשר יאיר שני

צביה נה צ'יץ
צביה צ'יץ

ר' יצחק
ר' יצחק
ר' יצחק

כתובת יצחק ברוך
מאיר ג'יטל

יצחק מאה הבהן פ'בין
ברוך חיים סימאון
גיטל ר' ג'טל
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