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Henrietta Lacks is one of the influential people in American history, yet many people have never heard of her, or her contribution. Upon visiting her doctor in February of 1951, she was diagnosed with stage four, cervical cancer. It was at that visit that her doctor took a tissue sample from Henrietta's cervix and looked at her cells more closely in the laboratory. When he realized that her cervical cells were unique, prolific, and had a very interesting cell signature, he started disseminating these cells without Henrietta's consent or knowledge. Later that year in October, she succumbed to her disease, however her cancer cells lived on. They were duplicated and passed around the scientific community because of their unique ability to replicate and survive, even in conditions that would have otherwise killed normal cells. They were they dubbed "HeLa" cells, as an abbreviation of Henrietta Lacks' name, though her family was never notified. These HeLa cells were used and sold throughout history for a number of scientific discoveries.

HeLa cells were used by Jonas Salk to test the first polio vaccine in the 1950s. A large volume of HeLa cells were needed for the testing of Salk's polio vaccine, prompting the National Foundation for Infantile Paralysis (NFIP) to find a facility capable of mass-producing HeLa cells. In the spring of 1953, a cell culture factory was established at Tuskegee University to supply Salk and other labs with HeLa cells. Less than a year later, Salk's vaccine was ready for human trials. HeLa cells were also the first human cells to be successfully cloned in 1955 by Theodore Puck and Philip I Marcus at the University of Colorado, Denver. Since that time, HeLa cells have been used for "research into cancer, AIDS, the effects of radiation and toxic substances, gene mapping, and many other scientific pursuits". According to author Rebecca Skloot, by 2009, "more than 60,000 scientific articles had been published about research done on HeLa, and that number was increasing steadily at a rate of more than 300 papers each month." HeLa cells have also been used in testing parvo virus, Oropouche virus, canine distemper virus, apoptosis in cells, radiation and chemotherapy resistant cancer strains, induced apoptosis in cancer cell lines, and a number of other studies.

Aside from the controversy surrounding the ethics of harvesting these cervical cancer cells and replicating them without Henrietta's knowledge or consent, the fact that scientists started to mass-produce and sell these cells for profit was even greater of an ethical concern. Her family had no knowledge of this until they were asked to provide their own cells and DNA to compare to HeLa cells, due to a mix up in the laboratory. That was the first time that her family had heard of any such cells and had a hard time even comprehending what this meant.

I do believe that her family should have been notified that their mom's cells had been replicated, harvested, and used for a number of scientific findings throughout the years. They should have been able to give consent and should have been able to receive some kind of financial endowment or royalties for the sale of these cells. I do understand that without her cells we would not have reached the level of breakthroughs that we did. It makes me think about what happens to our cultures and biopsies that are harvested when we go to the doctor. It makes me think that there should be a way to track what happens to our cell cultures as they make their way through the hands and microscopes of scientists. I also believe that there should be a disclosure update if your cells are used to further science in any way. With that in mind I am thankful for Henrietta's "unknowing" contribution to science and the human race. I appreciate that doctors, although without ethics in mind, harvested her cells because they were behaving differently. I am thankful that scientists were able to have the opportunity to build on her contribution and believe that it wasn't with bad intention. Henrietta Lacks should be credited with creating an "Immortal" legacy and her family should feel proud that their mom's cells will live on forever.

Resources

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