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Description

Genetic testing offers individuals the chance to know their risk for more than 5,000 health issues, but questions arise as to whether or not this information causes more harm than good.

Keywords

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Transcript

The Brave New World of Genetic Testing

LESTER HOLT, anchor:
Here's a tough question to ponder: if there's a risk that you will have a serious medical issue later in life,
would you want to know even if you may not be able to do anything about it? Modern medicine can now test your DNA for more than 5,000 health risks. Sometimes the results are clear cut, but sometimes they aren't. NBC News National Correspondent Kate Snow now with the story of two women who like so many others went searching for answers.

KATE SNOW, reporting:
Sitting in a waiting room near Denver, 46-year-old Marcela Velez is nervous. She's here because of her family. Three years ago, her mom back in Colombia was diagnosed with breast cancer and treated. Then last year, they found more, colon and liver. So today, the single mom is talking with a genetic counselor about her own cancer risk based on a blood test.

MARCELA VELEZ: Having cancer in the family is-- sorry.
SNOW: It's okay. It's a hard day, right?
VELEZ: It's hard. But I-- I just want to make sure that I do the right thing for my kids.
SNOW: It's what's driving so many women to take a simple test. Actress Angelina Jolie told the world she had preventative surgeries after she discovered she's at higher risk for breast and ovarian cancers. Have you seen an Angelina Effect?
MARY FREIVOGEL (Genetic Counselor): Absolutely.
WOMAN #1: Yes.
FREIVOGEL: They say, you know, I've known about this for years, my doctors told me to do it for years but it's just been in the news so much. And that's what brought me in.
SNOW: We were with 37-year-old single mom Lori Heid when she met with the genetic counselor for her results. Her mom is also a breast cancer survivor. Lori and Marcela had a test that looks for mutations in 25 genes, including the infamous BRCA 1 and 2, which dramatically increase the risk for breast and ovarian cancers.
WOMAN #1: So they will have to now find anything in any of the genes that they know causes increased risk for cancer. So very good news.
LORI HEID: Wow. Yeah, it is.
WOMAN #1: Yeah.
LORI HEID: It's a big relief.
SNOW: But for Marcela, the results are more complicated. The genetic counselor told her she does not have a BRCA mutation but she does have something else she wasn't expecting.
WOMAN #1: They found a mutation again in the PMS2 gene.
SNOW: That means Marcela's risk of developing colon cancer is three times higher than most peoples. She will need colonoscopies every year. The counselor explains why she also has a slightly higher risk for uterine cancer. Is there a lot of gray?
FREIVOGEL: Often there is, yes. And that is why we feel the genetic counselors are so essential to this process.
SNOW: Marcela is relieved the news isn't worse. But for her kids, it's hard to take.
WOMAN #2: Knowing she could get cancer, sad.
VELEZ: Cancer is a really scary word. I mean, I am scared of that word, and my kids, it's really hard for
them finding out that I have the propensity to get those types of cancers, it gives me the power to do something about it.

SNOW: Now the test these women got cost up to $6,000. But insurance does cover people with a certain family history. But some say everyone should have access. And tomorrow night, we'll explore that. And also, Lester, what might be the down side.

HOLT: It's a scary road to travel, though.

SNOW: Mm-Hm.

HOLT: Kate, thanks very much.