10 Things You Can Do To Use Genetic Health Information Constructively

The Human Genome Project brought media attention and public interest to genetics. Angelina Jolie, Katie Couric, and others have added to the focus on family history and cancer. Genetic researchers work to have their scientific findings translated into individualized health care practices. Health and disease are the result of complex interactions of genes, environment, and nurture. As medical understanding advances, the public uses genetic information in family health care in its broadest sense and potentially in more individual health choices. Working together on genes in life, including family history, genetic testing and treatments, we can help reduce health disparities. Here are ten things you can do to use genetic health information constructively.

1. No matter what your genetic makeup, exercise daily, eat a healthy diet and do not smoke.

2 If you are a potentially pregnant woman, follow the CDC's recommendation to have a diet rich in folate (naturally green foods) and take 0.4 mg of folic acid (in most multivitamins) daily in order to reduce the chance of congenital anomalies, such as spina bifida and anencephaly (open brain and spine). http://www.cdc.gov/ncbddd/folicacid/index.html. The United States Preventive Services Task Force recommends 0.4-0.8 mg. of folic acid daily.

3. Talk with your relatives about their health conditions. The Surgeon General has a web-based tool that prints out a family tree and gives some general health recommendations. As we geneticists like to say, talk it up, write it down and pass it on. http://www.hhs.gov/familyhistory/

4. Be informed and stay tuned. Most genetic tests provide useful information, while some genetic tests may not be ready for prime time. Always consider the pros and cons of any test. If it sounds too good to be true, a healthy dose of skepticism may be in order.

5. Use reliable web tools to increase your genetic health literacy. Genetics Home Reference (http://ghr.nlm.nih.gov/), the National Newborn Screening and Global Resource Center (http://genes-r-us.uthscsa.edu/resources/genetics/StatePages/genetic_region_map.htm) and Genetests (http://www.genetests.org/) are reliable web resources with many helpful links.

6. Advocacy groups (accessible under the umbrella of www.geneticalliance.org) and research networks such as clinical trials.gov are gateways to more condition-specific information, support networks, and research.

7. Feel comfortable in raising the topic of second opinions with your health care provider, particularly if there is not a clear-cut organizing cause for a variety of symptoms and findings.

8. For all of us, illness is a risk of being alive in the first place. Some of us may have genetic dispositions that place us at higher risk. As Dr. Francis Collins, director of the NIH said, "We are all diseased, just not diagnosed yet." The challenge is to understand what aspects of your genetic makeup place you at higher risk and to stay up-to-date about any improved prevention and management for those conditions.

9. Talk with your health care provider about your family history. Mentioning a positive family history of **S**imilar findings, **I**nherited or rare conditions, early **D**eaths, and **E**xtraordinary lab tests (especially genetic tests) on both the mother and father's **SIDES** of the family can be clues to more specific diagnoses.

10. Encourage young people to consider careers in genetics. With the growth of genetic information to benefit our health, we need to have trained persons who can help translate discoveries into improved well-being. (www.ashg.org, www.nsgc.org, www.acmg.net)

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