Risk Factors for Breast Cancer Too Broad to Be Very Useful

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Received date: February 04, 2017; Accepted date: February 13, 2017; Published date: February 20, 2017

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Citation: Wong KV. Stress Risk Factors for Breast Cancer Too Broad to Be Very Useful. J Clin Med Ther. 2017, 2:1.

Abstract

Therapeutics refers to the science of therapies or remedies/cures for disorders/illnesses of the human body, both mental and physical. Knowledge of risk factors pertaining to any particular disease would help reduce that disease in the population. It is the submission of the current work that the risk factors listed (as part of the related therapeutics) for breast cancer currently, may be too broad to be really useful to women. The outcome is an ever-rising number of breast cancer cases, the most widespread female cancer disease in the United States of America. The verdict for certain food and drink items like alcohol should be made, sooner rather than later. More work should be done to pin down the specifics of each of the risk factors listed by the appropriate agency/authority involved.

Keywords: Ageing; Genes; Menopause; Oral contraceptives; Alcohol

Literature Survey

The risk factors for breast cancer have been presented in different forms by many websites. According to the Centres of Disease Control and Prevention (CDC), the risk factors for breast cancer include the following [1]:

- Getting older: The risk for breast cancer increases with age; most breast cancers are diagnosed after age 50.
- Genetic mutations.
- Early menstrual period.
- Late or no pregnancy.
- Starting menopause after age 55.
- Not being physically active.
- Being overweight or obese after menopause. Older women who are overweight or obese have a higher risk of getting breast cancer than those at a normal weight.
- Having dense breasts.
- Using combination hormone therapy.

- Taking oral contraceptives (birth control pills). Certain forms of oral contraceptive pills have been found to raise breast cancer risk.
- Personal history of breast cancer.
- Personal history of certain non-cancerous breast diseases.
- Family history of breast cancer.
- Previous treatment using radiation therapy.
- Women who took the drug diethylstilbestrol (DES).
- Drinking alcohol. Studies show that a woman's risk for breast cancer increases with the more alcohol she drinks.
- Research suggests that other factors such as smoking, being exposed to chemicals that can cause cancer and night shift working also may increase breast cancer risk.

The foregoing list of risk factors have been reproduced here verbatim from [1] for easy reference. The risk factors were put together from a lot of research in each topic. The breadth of implication of some of these risk factors may be a result of the simplicity of the language used. For instance, in the first risk factor, the first phrase 'Getting older' should be removed. The remaining sentence is clearer, and does convey the message clearly without inciting undue anxiety. Everyone becomes older, so 'Getting older' may be mistaken by many as stating that breast cancer is an inevitable disease for all women, and even some men.

Discussion and Conclusion

For another example, factor number seven above probably came from works like reference [2]. The question to ask however is whether there are too many risk factors to be very useful for the ordinary woman in the street. In mid-October 2016, there was an interesting article in the Miami Herald about breast cancer, as October is designated 'Breast Cancer' Month' in the United States of America (USA). It is clear from the Miami Herald article [3], that one of the key interviewees of the article (whom we shall call MR) claimed she ate nutritiously, and had no family history of breast cancer. The ones that stand out as not addressed when looking at the check-list above; are oral contraceptives and drinking alcohol. She claimed that she was eating nutritiously. That point is also in question, when observing that she was overweight [4-6]. The obesity could be coming from eating gluten-containing compounds and sugar and/or sugar substitutes. Her general

assessment of her own nutrition may not be strict enough, and she may be indeed consuming preservatives (via bacon, ham, sausages for instance). She may have been consuming red meats more than recommended for healthy living. Simply, it could be that the amount of exercise performed in relation to number of calories consumed daily may be out of balance. Observing how MR is a relatively new mother (with a young baby), the guess about not enough exercise may not be far off the mark.

In a study by the Avon Foundation [7], it was reported that the breast cancer mortality rates among women were as follows: 19.04% for Puerto Ricans, 18.78% for Mexicans and 17.89% for Cubans, 10.5% for Central and South Americans in the USA. Between 2010 and 2014, the breast cancer mortality rate for black women was 30.7%, and for non-Hispanic white women was 22.41% [7]. My perception about these figures would suggest number of calories consumed to be less in general among the Hispanic women as compared to either black women or non-Hispanic white women. This goes back to the point that MR in the Miami Herald article was at risk (before she was diagnosed with breast cancer) and obesity factor was probably one of the factors. Statistically speaking, MR would not be a good representative of her racial group for breast cancer. She may not have consumed more than the statistically average American woman, but she may have exceeded her daily allowance for the statistically average Hispanic woman (since the typical immigrant Hispanic woman is smaller than the native-born Anglo-Saxon woman and the native-born African American woman). It is just an observation of the author, but the general tendency is for recent mothers to gain weight. Many women in the population do not take actions to reduce their weight to pre-pregnancy levels, even though some do. In some other cultures, this practice of reducing weight after childbirth is popularly carried out.

The risk factor about oral contraceptives should be more specific. Which specific types of these contraceptives are in the risky group? The age of the user, and the length of time of use of oral contraceptives, should also be significant variables that should be addressed.

The risk factor about DES is well researched [8-10], so this one is fine as is. Research has been published about DES since 1981 [9] to more recent times.

The risk factor about alcohol is not clear to the ordinary person. It is popularly accepted that a single glass of red wine a day is promoted as good for health, as an item in the Mediterranean diet (widely accepted as a healthful diet) [11,12]. Is alcohol a scientifically proven food item in the causes for breast cancer? If not, shouldn't it be removed from this large list of risk factors? At the very least, a more-detailed description of the risk factor should be provided. The judgment for a common drink item like alcohol should be made as soon as possible for obvious reasons. More time delay will allow (moderate amounts of) alcohol to linger in the 'allowable list' of 'food and drinks' for nutritionists, and be on the cancer risk-factor list as well. The resulting/existing confusion is obvious.

It is clear that some of the resources destined for breast cancer, should be used to make the current list of risk factors more useful for the ordinary person, especially women.

Acknowledgments

This paper is dedicated to all women around the world, in order that the risk factors for breast cancer will be better explained and more specific. In other words, women would not like to go through life, walking on eggshells, even when they have been taught to follow the rules faithfully, and are confident that they will follow the rules.

References

- 1. http://www.cdc.gov/cancer/breast/basic_info/risk_factors.htm.
- Carmichael AR, Bates T (2004) Obesity and breast cancer: a review of the literature. The Breast 13: 85-92.
- 3. Veciana-Suarez A (2016) For Many Hispanics, Fighting a More Aggressive Enemy. the Miami Herald pp: 1A-2A.
- 4. Wong KV (2015) Stresses caused by Too Much Wheat and Sugar. Glob J Immunol Allerg Dis 3: 6-10.
- Wong KV (2015) A Perspective of One Important Risk Factor of Type 2 Diabetes in Hispanic and Asian Minorities. Glob J Immunol Allerg Dis 3: 1-5.
- 6. Wong KV (2016) Consumption of Red Meat and its Possible Role in the Etiology of Colorectal Cancer. J Dis Glob Health 6: 51-55.
- https://www.avonfoundation.org/new-data-avon-foundationfunds-comprehensive-breast-cancer-study-uncoveringprevalence-mortality-among-u-s-hispanics-hispanic-subgroups/
- Palmer JR, Wise LA, Hatch EE, Troisi R, Titus-Ernstoff L, et al. (2006) Prenatal diethylstilbestrol exposure and risk of breast cancer. Cancer Epidemiol Biomarkers Prev 15: 1509-1514.
- Ingle JN, Ahmann DL, Green SJ, Edmonson JH, Bisel HF, et al. (1981) Randomized clinical trial of diethylstilbestrol versus tamoxifen in postmenopausal women with advanced breast cancer. N Engl J Med 304: 16-21.
- Palmer JR, Hatch EE, Rosenberg CL, Hartge P, Kaufman RH, et al. (2002) Risk of breast cancer in women exposed to diethylstilbestrol in utero: preliminary results (United States). Cancer Causes and Control 13: 753-758.
- 11. Gepner Y, Golan R, Harman-Boehm I, Henkin Y, Schwarzfuchs D, et al. (2015) Effects of Initiating Moderate Alcohol Intake on Cardiometabolic Risk in Adults With Type 2 Diabetes A 2-Year Randomized, Controlled Trial Two-Year Moderate Alcohol Intervention in Adults With Type 2 Diabetes. Ann Intern Med 163: 569-579.
- Hines LM, Stampfer MJ, Ma J, Gaziano JM, Ridker PM, et al. (2001) Genetic variation in alcohol dehydrogenase and the beneficial effect of moderate alcohol consumption on myocardial infarction. N Engl J Med 344: 549-555.