AUTOETHNOGRAPHY ESSAY

On March 1, 2022, a scientific debate on the topic "Breast cancer early detection by mammography screening" was conducted. Classmates shared their opinions on whether this approach was effective or not. Breast cancer is the second most frequent cancer in women, accounting for 30% of all new malignancies in women each year(Breast Cancer Statistics | How Common Is Breast Cancer?, n.d.). Cancer is a disease that impairs a person's physical and emotional well-being and those of their family. As a result, I feel that eradicating its consequences via early detection is critical.

The incidence of breast cancers is prevalent in women with mean age of 62 years.  So, the American Cancer Society recommends yearly mammography screening for all the middle-aged women who are at high risks for developing cancers (ACS Breast Cancer Screening Guidelines, n.d.). However, the evidence implies that a family history of BRCA genes is a risk factor. In 0.25% of the population, the BRCA genes are present (CDC, 2021, Hereditary Breast Cancer and BRCA Genes | Bring Your Brave) The mutations in these genes are responsible for cancer development, and children have a 50% chance of inheriting these genes from their parents. For this reason, Ashkenazi Jews have a 10 times higher rate of breast cancer than the overall population. Because the ACS recommends screening tests based on risk factors, I feel that mammography should be advocated to women who have a positive family history of BRCA gene mutations.

Early detection of breast cancer can help decrease interventions at later stages, according to Ashwini Dodda and a few other classmates. This assertion is accurate for a small fraction of the population, but not for all the instances that have been screened. The prospect of lowering breast cancer death rates with mammographic screening was supported by 30% of the class. Even if the tumors are larger in size to be detected, screening mammography cannot reduce the incidence of malignant and metastatic cancers (Gøtzsche, 2015). However, according to the findings of a Danish research, there is only a 1% reduction in breast cancer death rates in screening regions and a 2% reduction in non-screening areas (Danish Study Rekindles Debate on Overdiagnosis of Breast Cancer, n.d.).  There is little variation in breast cancer death rates among places where screening is used and those where screening is not used (Autier & Boniol, 2018). The outcomes of these research show that death rate forecasts are unreliable and cannot be generalized.

Regarding the likelihood of overdiagnosis with this screening mammography, I agree with Sanjana Madarapu. She mentioned that the three clinical studies in the meta-analysis indicated 19% of over diagnosed patients (Jacklyn et al., 2016). Patients might have a lot of apprehensions as a result of the overdiagnosis, which can lead to psychological anguish. There is also a scope for rendering unnecessary treatment to over diagnosed cases that might have long term consequences.

The possibility of false positive instances originating from these screening tests cannot be avoided since it is dependent on the equipment utilized, patient circumstances, the radiologist's expertise and understanding, and the technique employed to extract these mammograms. According to Maileemithraa Panneerselvam, there is a 10-year risk of invasive biopsies with false positive results according to a research article (Elmore et al., 1998). These results, in my opinion, might have long-term ramifications for the patient's mental health and deter them from taking screening tests in the future.

The amount of radiation emitted by screening mammography is much beneath the permissible level for people. But, in my opinion, annual exposure to this ionizing radiation is not recommended since it might have deadly consequences on proliferating cells. Furthermore, owing to current health problems, the patient may be exposed to other sources of radiation, such as MRIs and CT scans, which might contribute to added radiation impacts. There is a good probability that a person will be exposed to the detrimental effects of low dose radiation. This phenomenon is referred to as low dosage hyper susceptibility (Pauwels et al., 2016).

This exposure is lower than the 50-100mGy units used in screening approaches. The evidence suggests even low doses might trigger lethal damage to the cells under specific circumstances.

According to Vaishnavi Shukla, this radiation dose is highly safe even for pregnant women, however any type of radiation exposure between the first and third trimesters is not recommended unless prescribed by a specialist since it might target the embryo's rapidly proliferating cells. Because mammography screening is a preventative practice, I believe it should be avoided in pregnant women unless they have a positive family history.

It is claimed that the screening mammography's usefulness is well appreciated in dense connective tissue. As a result, mammography is often only indicated for women over the age of 40, not for young people. Vedasree Yerrabandi agrees with this perspective. Gundarapu Sai Varshith had put forward the statistics of male population diagnosed with breast cancer would be 2700 in the year 2022 (Key Statistics for Breast Cancer in Men, n.d.). Most of these malignancies are classified as Ductal carcinomas, which are malignant. Diagnostic mammography, rather than screening examinations, can reliably detect such metastatic diseases. As a result, I don’t see the use of these mammograms in males.

In a nutshell, I believe that screening mammography could be replaced by alternative diagnostic modalities that are less apprehensive yet still provide accurate diagnosis. My suggestion of genetic counseling which includes BRCA gene testing via blood tests was supported by 25% of the classmates. This blood test, according to Nikhitha Swarna, should be the first-choice strategy for early breast cancer screening. In those who haven't tested positive for BRCA genes, histopathological examinations, non-radiation testing like thermography, and ultrasounds should be encouraged. To some extent, biannual mammography screening can lower the risk of false positive findings. With the foregoing lines, I'd want to express my thoughts about mammography screening for early breast cancer detection.

References:

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