

Fracking Systems are Politically Driven and are a Detriment to the Health of Women

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Abstract

There is widespread agreement that factors like diet, a family history of chronic illnesses, and lifestyle choices affect the existence of health disparities among women. However, it is often overlooked that the environmental surroundings can be the main factor negatively affecting one's health. Breast cancer claims the lives of over 45,000 women annually, with a disproportionate impact on women who identify as black, indigenous, or women of color. It is often overlooked that oil, chemical, and waste management factories house dangerous chemicals that are released into the air and nearby areas. These chemicals infiltrate our living spaces and have a harmful effect on women's bodies, compromising the function of our antibodies and T-cells. Research studies have indicated that the composition and potential impacts of fracking fluid have also influenced the United States. The Environmental Protection Agency (EPA) (2004) conducted an analysis of different methods of disposal and their level of safety. This is a significant issue due to the necessity of storing and disposing of flow backwater. Fracking has been associated with elevated incidences of cancer as well as disorders affecting the nervous, immune, and cardiovascular systems. This paper will analyze three lines of evidence: the correlation between breast cancer, fracking systems, and the reproductive cycle in nature, also known as the harmful chain effect. It will explore how these factors contribute to what can be considered a form of female genocide, referred to as necro-politics. Additionally, it will investigate the link between higher cancer rates and residing in close proximity to chemically polluting factories. These factors are closely related to each other. As a result, environmental harm is primarily responsible for the differences and social factors that affect women's health. Specifically, the practice of hydraulic fracking in oil and chemical factories is causing significant harm to women and gender non-conforming individuals with breast cancer the release of numerous chemicals into the atmosphere and surrounding areas is what causes this harm.

Keywords: Hydraulic fracturing, Breast Cancer, Women's health, Disparities, Necro-politics, Environmental casualties

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Introduction

After conducting extensive research and analysis of numerous sources, it can be deduced that fracking systems generate environmental stressors that contribute to a wide range of health ailments and complications. Fracking can be categorized into various types, including hydraulic, flow-back water, oil, gas, petroleum, and others. The STI group [1] states that the rationale for fracking lies in its ability to provide various benefits for oil and gas extraction, such as enhanced accessibility, improved efficiency, and reduced costs. Furthermore, the STI group [1] strongly advocates for the implementation of fracking systems due to their effectiveness in extracting water from wells, utilization of geothermal systems, regulation of stress levels in the earth, controlled rock fragmentation, and various other benefits. While these reasons may serve specific purposes for the earth, the overall impact of fracking on the surrounding environment, particularly on the species crucial for the sustenance of the planet, namely humans, is profoundly harmful. According to research by Environmental Health News, women who live close to fracking sites have a higher likelihood of having babies with low infant health indices, high-risk pregnancies, or below-average birth weights. (Kristina [2], "After a decade of research, here's what scientists know about the health impacts of fracking.") The composition and potential impacts of fracking fluid have also prompted concern in the United States. The EPA (2004) conducted an investigation into different methods of disposal and their level of safety. A recent study conducted by Jennifer Harkness et al. (2015) discovered

previously unidentified pollutants, including iodide, bromide, and ammonium, in the wastewater. This is due to the necessity of storing and disposing of the flow backwater. Fracking has been associated with elevated incidences of cancer as well as disorders affecting the nervous, immune, and cardiovascular systems. Fracking poses significant health risks to the environment, particularly for women, and exacerbates social determinants of health. The widespread use of fracking is causing severe environmental damage and contributing to the premature deaths of women.

Research and Resource Development

The research topic was motivated by the following inquiries: "What are the underlying causes behind the disproportionately high prevalence of health conditions, such as cardiovascular diseases, breast cancer, and respiratory diseases, among women? Additionally, what are the contributing factors that exacerbate the rates, symptoms, and complications of these conditions?" This paper was meticulously crafted using a wide range of articles, academic books, and journals authored by renowned physicians, scientists, journalists, and other experts who have explored the subject of fracking and its associated health risks. Reputable organizations, such as Environmental Health News, Global Public Health, and the International Journal of Feminist Approaches in Bioethics, among others, published the primary sources examining and assessing the effects of fracking, its impact on health, and the occurrence of female genocide. Dr. Kristen Abatsis McHenry,



a researcher at Spelman College and the University of Massachusetts at Amherst, has made significant contributions to this cause [3-5]. Her research focuses on the relationship between women, fracking, and necro-politics, as well as the impact of fracking on breast cancer and the overall negative consequences it has for women [6]. Theoretical strategy refers to a planned approach or method that is based on principles and concepts rather than practical experience or application.

Theoretical Strategy

During the investigation of this research project, several alarming facts and statements were uncovered that pose significant challenges. The aim of this research is to analyze the theoretical aspects of the topic and provide evidence to support the claim that fracking has negative effects on women's health, political influence, and overall well-being, "based on the information provided by the United States." According to the House Committee in 2011, drilling companies have utilized fracking fluids that contain recognized carcinogens. According to the Committee's findings, from 2005 to 2009, oil and gas service companies utilized hydraulic fracturing products that contained twenty-nine chemicals. These chemicals are either known or suspected to cause cancer in humans and are regulated under the Safe Drinking Water Act for their potential harm to human health. Additionally, they are listed as hazardous air pollutants under the Clean Air Act. The Committee additionally discovered that the fracking injection fluid contains benzene, toluene, xylene, and ethylbenzene. The EPA has classified benzene as a Group A human carcinogen. The National Academy of Medicine (2011), previously known as the Institute of Medicine, establishes a connection between breast cancer and benzene, 1,3-butadiene, and ethylene oxide. These substances can be present in gasoline fumes, vehicle exhaust, tobacco smoke, and certain work environments". Upon further investigation, it was fascinating to uncover that certain regions of the United States fracking sites approved by governments are causing environmental degradation and releasing chemicals that can have long-term health effects on citizens, particularly women. Moreover, it is imperative for the general public to possess a comprehensive comprehension of the operational process of fracking and the underlying reasons for its continued substantial endorsement. "This is a politically contentious subject that can be effectively examined in communities with abundant natural resources for fracking and strong political leadership capable of mobilizing enough support to encourage the recruitment of the fracking industry." Within this context, women face heightened vulnerability as they grapple with the dilemma of prioritizing economic advantages, as evident in their financial circumstances, over their own well-being. The extensive history of coal industry extraction in Pennsylvania has undeniably shaped how communities react to fracking. Amanda Poole and Anastasia Hudgins (2014) contend that the coal industry imposes adverse consequences on miners, their families, and the environment, known as negative externalities. Despite the decline of coal mining, individuals continue to bear the burden of losing family members to chronic illnesses or accidents, as well as the presence of two thousand five hundred miles of Pennsylvania streams that are unable to sustain life due to mine drainage". Finally, "Regarding hydraulic fracturing, a study conducted in 2011 at the request of the Democratic Party in the United States" [7]. The House of Representatives Committee on Energy and Commerce discovered that out of the seven hundred chemicals employed in the fracking procedure, benzene, acrylamide, ethylene oxide, bisphenol A, and formaldehyde were identified as being associated with the exacerbation of health issues and environmental contamination. The chemicals employed in hydraulic fracturing have been discovered to possess carcinogenic characteristics, indicating their capacity to induce cancer. Hence, it is logical to infer that individuals who come into contact with these chemicals due to their close proximity

to fracking sites may encounter an elevated susceptibility to developing breast cancer. The increased risk intensifies the already existing health inequalities among women, as specific groups may be more susceptible to the harmful consequences of these chemicals. Furthermore, hydraulic fracturing and its related activities have a disproportionate impact on marginalized communities, resulting in environmental injustice. These communities frequently experience the adverse effects of fracking, such as pollution, noise, and diminished air and water quality.

Environmental injustice denotes the inequitable allocation of environmental burdens and advantages, wherein marginalized communities bear a disproportionate impact from detrimental environmental factors. Hydraulic fracturing, commonly known as fracking, often occurs in close proximity to low-income neighborhoods and communities predominantly inhabited by people of color. Consequently, these communities are at an elevated risk of being exposed to noxious substances, which can contribute to the onset of breast cancer and other health ailments. The disproportionate allocation of health risks exacerbates health disparities and reinforces pre-existing social inequities. Ultimately, the implementation of hydraulic fracturing has substantial ramifications for the incidence of breast cancer in women and exacerbates health disparities and environmental inequities. The chemicals employed in hydraulic fracturing, commonly known as fracking, have been associated with exacerbating health issues and causing environmental contamination, including an elevated susceptibility to breast cancer. This increased risk worsens the existing health inequalities among women, especially those belonging to marginalized communities. Furthermore, the uneven allocation of fracking sites and the resulting environmental burdens disproportionately affect these communities, thereby perpetuating environmental injustice. It is imperative to tackle these concerns, champion policies that give priority to the health and well-being of all individuals, irrespective of their gender identity, and tackle the environmental injustices linked to hydraulic fracturing. As the investigation into the connection between fracking and health problems progresses, it is also revealed that a significant factor in the ongoing practice of fracking is the support from corporate affiliations, even though certain government departments recognize the harmful effects of fracking. Organizations such as BCA have accused companies like Chesapeake Energy (the parent company of Nomac Drilling) of engaging in pinkwashing. Nomac Drilling adorned its drill rigs with pink wrapping in 2012 to commemorate breast cancer awareness. In a similar vein, Baker Hughes, a prominent oil field service company and a frontrunner in the fracking sector, collaborated with the Susan G. Komen Foundation during the National Breast Cancer Awareness Month (NBCAM) in 2014. Their joint effort involved distributing 1,000 pink drill bits and contributing a sum of \$100,000. Baker Hughes is running a campaign called "Doing Our Bit for the Cure" to support research, screening, and education aimed at finding cures for a disease that causes a death every 60 seconds. The donation was made to the Susan G. Komen Foundation on October 26, 2014, during an NFL game in Pittsburgh. Baker Hughes is a sponsor of the Survivor Pin Celebration held at the annual Houston Race for the Cure. As this situation progressed, it prompted inquiries about the conflict surrounding efforts to combat breast cancer while simultaneously providing funding for materials that perpetuate the consequences of breast cancer. Among all types of cancer, breast cancer is considered the most prevalent [8], but it also ranks highly as a cause of death among women. Given that organizations like Susan G. Komen, which are prominent advocates in the fight against breast cancer and actively work to increase awareness and funding for a cure, it is puzzling to see them receiving substantial financial contributions from companies that contradict their mission. Furthermore, it is highly concerning to find that out of the 26 candidates



in the recent 2020 presidential election, only 11 would prohibit fracking altogether, while the rest would simply implement stricter regulations. Susan G. Komen: The partnership between Komen and Baker Hughes is a highly objectionable instance of pinkwashing, as Susan G. Komen openly acknowledges on its website that certain chemicals are linked to the risk of cancer. These identical chemicals are also present in the fluid used for fracking. The instance of the pink drill bits serves as a reminder that although Susan G. Komen is shifting towards promoting prevention and raising awareness about environmental causes of cancer, they still collaborate with companies that contribute to cancer. Corporate partnerships and elected official affiliations significantly influence the ongoing operation of fracking sites and the utilization of hazardous chemical wastelands. Regrettably, although it would be preferable to dismantle and relocate fracking sites to more environmentally friendly locations, it is disheartening that there is significant support for the ongoing practice of fracking, despite the additional costs. This practice consistently releases hazardous chemicals, causing millions of people to suffer from life-threatening diseases and infections.

According to the American Cancer Society (ACS), breast cancer is the predominant form of cancer among women in the United States, excluding skin cancers [9]. Presently, the typical probability of a woman in the United States acquiring breast cancer at some point in her lifetime is approximately 13%. Consequently, the probability of her developing breast cancer is 1 in 8. This implies that there is a probability of 7 out of 8 that she will not contract the disease. Additionally, breast cancer ranks as the second most common cause of cancer-related mortality in women, with only lung cancer surpassing it in terms of annual fatalities. The mortality rate for breast cancer in women is approximately 1 in 38, which translates to around 2.6%. From 2007 onwards, mortality rates due to breast cancer have remained stable among women under the age of 50, while they have continued to decline among older women. Between 2013 and 2017, there was an annual decrease in the death rate of 1.3%. However, the ACS claims that these declines are due to early detection of breast cancer through screening, increased awareness, and improved therapeutic interventions. Given the high prevalence of breast cancer among women, one might assume that it is effectively managed and monitored through the awareness and research efforts that have been undertaken. Regrettably, this is not the situation, particularly for a disease that can be easily acquired from the pollutants present in our surroundings. Pink organizations such as the Susan G. Komen Foundation and the Avon Foundation establish corporate alliances with General Electric, Bristol-Myers, Estee Lauder, Ford, and other corporations that directly benefit from the breast cancer industry. Indeed, the primary source of Komen's budget stems from its corporate partners. This is noteworthy because the major contributors to breast cancer research encompass prominent institutions such as the National Cancer Institute, the National Institute of Health, the Department of Defense, Avon, Susan G. Komen, and the ACS, among others. The divergent objectives of corporations and advocacy organizations, such as Komen, serve as a significant focal point for examining the breast cancer movement.

Policy Recommendations

There is a need for reform to address the presence of hazardous chemicals used in fracking sites, which pose various health risks and complications for women. The purported environmental efficacy of fracking significantly fails to provide health advantages for women's well-being. Countless women have succumbed to the severity and intricacies of breast cancer, while the true culprits are the unassuming factories that pervade our daily existence. As these environmental stressors persist in harming women, society can employ various strategies to

safeguard and ensure the safety of women while also conserving our depleted lands through alternative and efficient approaches. With growing opposition to the use of fracking sites and their harmful chemical emissions, many people are actively taking steps to address the health risks associated with fracking, particularly in relation to women's health. These actions include establishing a strong social media presence to promote digital education, organizing numerous in-person rallies and peaceful protests, and becoming more vocal in their interactions with elected officials. In order to address the negative effects of fracking on women's health, it is important to take the following actions to reduce the gap between fracking sites and factories and the health consequences resulting from the release of chemicals and sediments: Recognize the intersectional oppression that women experience, fight for justice to eliminate health disparities, stop environmental injustice, and hold engineers, businesses, contractors, the government, and elected officials accountable for their actions. "Pro-energy advocates have frequently mentioned fracking as a potential solution to our urgent energy needs. This is because it can provide the United States with a substantial domestic energy supply, reducing our reliance on foreign oil and creating more job opportunities." In addition, proponents assert that the advancement of the industry is crucial for fostering economic expansion in specific rural and impoverished regions.

Fracking has a significant impact on the health of women, leading to various diseases. It is widely acknowledged that the involvement of corporate businesses and political affiliations in fracking is the root cause of women's ongoing suffering. In order to avoid these instances of women being prominently affected by the negative consequences of fracking, it is necessary to go beyond simply regulating the fracking sites; there must be a system in place to hold individuals accountable and provide reassurance. This message serves as a reminder of the serious harm that chemical emissions cause to those who work for fracking companies, invest in fracking, and support fracking. These emissions not only have detrimental effects on the individuals themselves but also on others, particularly women, especially those with pre-existing health conditions. Multiple sources have consistently emphasized that individuals who are primarily involved in investing and advocating for the operation and maintenance of fracking sites have the ability to prevent many of these complications. In addition to providing consistent education and raising public awareness about these issues, it is strongly recommended that communities proactively engage with the subject matter in order to be prepared to handle bodies, regardless of whether they are familiar with them or not. However, this can only be achieved if the access gateway is more permissive. The primary challenge in providing communities with the means to fully engage in these environments is the absence of access—a lack of access to reliable and comprehensive information regarding the chemicals being released into the surrounding environment and atmosphere. This educational program aims to raise awareness about fracking sites, the specific chemicals used in the process, and the detrimental consequences of exposure to these chemicals. Due to increasing awareness, a significant number of people will oppose the ongoing operations on fracking sites once they become aware of their detrimental effects.

Conclusion

Upon thorough evaluation and examination of the health consequences resulting from the lack of attention to fracking sites, it has been determined that these sites release dangerous chemicals, which in turn create opportunities for the development of various health ailments. Furthermore, it was deduced that fracking sites persist in operation as a result of significant influence and support from elected officials, business corporations, and organizations. After conducting



thorough research and analyzing the published data, it can be inferred that corporations and organizations still receive lump-sum payments, support, and advocacy to sustain their fracking operations, albeit with the intention of regulating them. Moreover, organizations like BCA are particularly concerned about how the process of fracking leads to water contamination and air pollution, which in turn poses a threat to the health of individuals residing near such industrial development. They are additionally concerned about the potential for fracking chemicals to pollute the food supply by using contaminated water. The group argues that fracking poses significant risks and is severely lacking in regulation. Although the number of anti-fracking organizations is growing, only a small percentage explicitly prioritize women's health as their main mission and focus. However, within breast cancer organizations, there is a growing number of groups such as Breast Cancer Action and Breast Cancer Fund (2014) that are addressing fracking as a significant environmental and women's health issue." The ongoing construction of fracking sites and the resulting health conditions among women have supported the hypothesis that fracking systems, driven by corporate funding and government support, are politically and corporately influenced and pose a health risk to women.

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None.

Conflict of Interest

None.

References

1. STI Group - Industrial, Midstream & Fabrication Services (2014). "The Different Well Types for Fracking and The Reasons For The Process." STI Group - Industrial, Midstream & Fabrication Services.
2. Kristina M (2019) After a Decade of Research, Here's What Scientists Know about the Health Impacts of Fracking. *Environ Health News*
3. McHenry KA (2015) Breast cancer activism in the United States and the politics of genes. *Int J Fem Approaches Bioeth* 8(1): 182-200. <https://doi.org/10.3138/ijfab.8.1.0182>
4. McHenry KA (2017) Fracking women: A feminist critical analysis of hydraulic fracturing in Pennsylvania. *Int J Fem Approaches Bioeth* 10(2): 79-104. <https://doi.org/10.3138/ijfab.10.2.79>
5. McHenry KA (2015) *The Green Solution to Breast Cancer: A Promise for Prevention*. Bloomsbury Publishing USA
6. www.dailymail.co.uk/health/article-5363003/Fracking-linked-breast-cancer.html
7. Fracking Ban: Where 2020 Democrats Stand. *The Washington Post*, WP Company.
8. Breast Cancer Statistics (2020) Centers for Disease Control and Prevention, Centers for Disease Control and Prevention.
9. <https://www.cancer.org/cancer/types/breast-cancer/about/how-common-is-breast-cancer.html>