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Influence of Mass Media on Medical Screening, Specifically Breast Cancer Screening

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Mass Media has influenced various aspects of our culture, from how we wake up to how we sleep. Over the years, popular media has expanded in our society due to the technological advancements; we are now able to access these various mass media mediums through one tap. One of the most influential topics in our culture is health and mass media has played a huge role in impacting a healthy lifestyle. Through this medium, people are also informed about medical advancements which can be very helpful in maintaining a healthy lifestyle if they are at a risk for a disease. With the information presented people make decisions. ¹Carmelo Anthony once said, “Any decision I make is the biggest decision in my life”. Every decision we make in our lives is influenced by how we interpret the knowledge we are given at that point in time, especially medical decisions. Medical decisions are the most difficult because; one wrong decision can raise complications that we may have to deal with for the rest of our lives. Although, this medium may have its positive effects, mass media throughout the years usually has an affinity to reporting only one side, usually only the positives when it comes to medical advancements. It is important to understand how overtime people have evolved to become aware of medical advancements in an unfavorable way.

Due to the different varieties of mass media, different people connect to it in their own way as well as find it persuading due to the famous icons that promote that particular lifestyle. Medical screening exams are a great tool for preventing diseases. They have actually been gaining publicity over these past years due to the various mediums of mass media. Many people were not aware of medical exams, when they first came out and many were skeptical about the

¹ Carmelo Anthony Quote." BrainyQuote.

entire process. Over the years, medical tests have become more popular; although, the mass media does not relay the information in a proper way. People mostly only know about the up side of the exams and take the tests without any recommendation or the full knowledge. Most methods of publicizing breast cancer screening only inform the public about the benefits of getting the exam done rather than informing the patient about how important it is to understand the risks of any cancer screening exam. Different media has different techniques to help become aware, but misleading them is not the best way to spread an extremely important medical advancement to our culture. There are a very few people which double check what the media presents to them, most of the time, people including me will take in the information without being skeptical. This is the reason why it is important to understand the consequences of not passing information along in a proper way. No doubt, mass media is a great method of shipping information to everyone, but it should be done in the right way. An analysis of popular media methods reveals that it is has a powerful impact on supporting medical screening tests, specifically breast cancer screening; but it is still extremely important to eliminate all the misleading information relayed by the mass media.

Mass Media

Before analyzing specific examples of breast screening messages in media, it is important to understand how mass media portrays medical advancements in a positive and negative light. Using studies of mass media, I will highlight the importance of providing accurate information to media consumers as well as the setbacks of doing the opposite.

In general, when observing how the mass media portrays important scientific advancements, they are usually fabricated, where only the pros are highlighted and the cons are not mentioned. Recently in July of 2016 the *Journal of Health Communication* published an

article titled “Unwarranted Optimism in Media Portrayals of Genetic Research on Addiction Overshadows Critical, Ethical and Social Concerns”. Due to increased addiction rates in the United States, scientists have begun genetic research on addiction. This article looks at how the public portrays this research, method and techniques to the public. The authors of this article, Ostergren looked at one hundred forty five news articles on genetic research on addiction from the media in the United States; print as well as web sources. They found that articles, which talk about prevention, emphasize “vaccine development and identifying individuals at genetic risk through population screenings”(Ostergren 555). Articles that talked about treatment “promoted current pharmaceutical solutions and highlight the possibility of tailoring treatments to specific genetic variants” (Ostergren 555). The authors are not focused on the consequences of the media, only reporting the positive aspects of the advancements and avoid reporting the risks and consequences. This article focuses on the importance of publishing correct information, specifically reporting both sides of a treatment option for everyone so that when a person reads media reports they read about both sides and are not blindsided by the other.²

It is always important to promote a test, which can prevent patients from suffering a horrible disease in the future. But, tests are so readily available nowadays; some are even free, that nobody really truly understands their importance until they are in that situation. Mass media with the correct technique can be a convenient way of promoting screening exams for diseases that occur way too often in our society. David an author of the *Journal of Health Communication* published an article, which analyzed the effectiveness of a mass media campaign in promoting HIV Testing. This article discusses the use of telephone hotlines and other forms of media to promote HIV testing to a certain demographic, African Americans. David states the success of these methods of promotion of HIV testing and an increase in information about HIV itself

² Ostergren, Jenny. *Journal of Health Communication*(2015): 555-65

among the population. If media communicates the information in the correct way, like the HIV Testing campaign described, the general public will always be successfully informed. The only drawback of this study is it only assesses only one of many demographics in the United States, so the conclusion is not fully developed, but it is obvious that if a media campaign is structured in the right way it will have a positive impact on every demographic.

All the information is readily available, it is communicating that is difficult. Due to the large impact mass media has on the lives of everyone nowadays, it is important to realize how much of a difference is between media that thoroughly does the research and media that does not. There is a huge difference and this difference can have a powerful impact on the lives of many people in a positive or a negative way. Therefore it will only benefit our society if research is done comprehensively, otherwise the consequences can be risky, specifically for medical screening exams.

Screening Exams

In order to understand the importance of reporting thorough information about medical screening exams, specifically breast cancer screening exams, it is important to understand how they were developed as well as the process of a patient undergoing the entire process of the screening exam; including the risks of breast cancer screening. Many times patients only know the up side of the exam and not the risks associated with exams.

Medical screening tests are a great way to reduce the risk of a preventable disease. Cancer is one of the leading causes of death, specifically breast cancer for women. Breast cancer screening was introduced in the late 1990s and allows doctors to detect cancer at an earlier stage so that they will be able to treat it and prevent it from occurring. Breast cancer screening involves both risks and benefits. Risks include not getting accurate results, anxiety caused by

inaccurate results, risks from radiation exposure and over diagnosis. Benefits include decrease in mortality rates and surviving from breast cancer. Indication of benefits allows us to understand the importance of relaying this knowledge to our culture. But, even if a doctor suggests this to a patient at risk, a patient is more likely to take it lightly unless they have heard or seen this test being done or advertised through the use of mass media.

Rimer in 2005 published a study of the “Use of Multiple Media and Breast Cancer Screening”. She discusses the importance of popular media to encourage people to seek medical care and a how mass media is good form of communication to get a physician’s recommendation across. Although, there is certainly weight on a doctor’s recommendation, if people hear it through different mediums, the suggestions are more relevant or connect with people more than just a doctor telling them. This also does not mean a professional’s suggestion should be replaced with the media, but as Rimer states, “encouraging communications’ professionals to use particular strategies, alone or in combination, based on their goals and theories, what they know about their audiences, the messages they are trying to convey, and the resources that are available. We should be building an evidence-based foundation that can be used to inform communications decisions”(Rimer). The National Cancer Institute (NCI) recently concluded that cancer communications is so important that a large increase in commitment and investment is required in this area.

Conveying the risks and benefits is critical to communicate to a patient when referring a test. Mostly all medical related tests come with costs as well as benefits. Overtime, the costs of breast cancer screening have been accumulated. The main risk associated with breast cancer is over diagnosis. The mammographic test has two outcomes, one if false-negative, indicating breast cancer does not exist and false positive, indicating breast cancer does exist. Many times

when the mammographic results show incorrect outcomes when a patient does or does not have cancer. Therefore, when results show false positive most doctors tend to take the next step in the treatment, which sometimes turns out unnecessary. This leads to many more complications and causes struggles in a patient's life.³

Recently in the *Journal of Critical Health*, Jian published a qualitative study, which discussed the consequences of careless information being passed about breast cancer screening through mass media. Breast cancer screening is a great medical exam to detect cancer in the early stages, but at the same time it also causes harm in some women, which could be very much avoided with enough information given to the women going through breast cancer screening. In this article, the author explores how breast cancer is publicized to the people. They looked at “national newspapers, charity bodies websites, and official bodies’ websites over a two-year period, and analyzed this using thematic content analysis. Charities’ and official bodies’ positions were similar in that they were supportive of the NHS Breast Screening Programme, and tended to defend it against its critics” (Chen 62). They saw that mostly all the media articles explained only the positive aspects of breast cancer screening, while presenting case studies of celebrities, but there was not a complete explanation with the risks and consequences of breast cancer screening. Jian suggested that the mass media explains screening tests thoroughly and informs the public about the real information regarding any test after doing complete research about whatever the mass media writes about.⁴

By not informing a patient about the risks associated with any medical screening exam can lead to severe consequences. Consequences include over diagnosis or getting side effects from the medical screening exams. Some patients tend to go for the screening exams even

³ Rimer, Barbara K. *Journal of Health Communication* 5, no. 2 (2000): 113-16.

⁴ Chen, Jian. *Critical Public Health*(2014): 62-72.

though they may not be at risk or have seen a few symptoms, which may not even be related to cancer. This is why it is critical that a patient understand what are the downsides to medical screening exams. In 2005, over diagnosis and overtreatment was discussed in the *Journal of Breast Cancer*. This paper discusses the causation of breast cancer, which has led to an increase in breast cancer incidence during the early years of screening. Over diagnosis is defined as the diagnosis of what may potentially be “progressive” cancer in a patient, which ends up dying due to an accident, other disease or “an unexpected cerebrovascular or cardiovascular event, before the tumor would have given rise to clinical symptoms”(S. Duffy). The other definition of over diagnosis is when a doctor identifies a tumor length longer than it actually is and therefore diagnosing it as potential for disease, when it actually has nothing to do with disease. The research team decided to use data from two trials of mammographic screening “to establish the timing and magnitude of any excess incidence of invasive disease and ductal carcinoma...and provide explicit estimates of the rate of ‘real ‘and non-progressive ‘over diagnosed’ tumors from the study groups of the trials”(S. Duffy). They were able to conclude that, over diagnosis is a minor phenomenon that occurs estimated that less than 5% of cases diagnosed at prevalence screen and less than 1% of cases diagnosed at incidence screens are being over diagnosed. Overall, we estimate over diagnosis to be around 1% of all cases diagnosed in screened populations” (S. Duffy). Although it is a minor phenomenon, further research still needs to be done to test the uncertainty of the results, suggesting that over diagnosis should not be ignored where mammographic screening is concerned. In addition to over diagnosis, mammographic screening and breast self-examination also have associated risks.⁵

⁵ S. Duffy. *Cancer Research Cancer Res* 71, no. 24 Supplement (2011)

Social media is a great method to raise awareness or inform our society about important diseases and medical advancements. Mostly everyone has access to all types of social media and one of the most popular nowadays is Twitter. Twitter is a unique platform where people express in a hundred and forty characters. Twitter is especially good at spreading information through a hash tag and medical organizations use this as a great way to promote awareness about certain diseases. Most of time organization like to partner with celebrities to promote and allows people to relate. The information that is passed through these social media campaigns do not seems to be the most effective because what ends happening is, non relevant or basic information everyone already knows is spread, but the full picture is still not conveyed to the targeted members of our community. In 2013, Thackeray examined the best-known awareness event, breast cancer awareness month (BCAM). BCAM month outreach efforts have been associated with increased media coverage, screening mammography and online information searching. Social media has enhanced traditional mass media coverage. However, there is a dearth of literature about how social media is used during awareness-related events. The purpose of this research was to understand how Twitter a form of media was being used during BCAM. This was a cross-sectional, descriptive study. They collected breast cancer- related tweets from 26 September- 12 November 2012, using Twitter's application programming interface. Then they classified Twitter users into organizations, individuals, and celebrities; each tweet was classified as an original or a re-tweet, and inclusion of a mention, meaning a reference to another Twitter user with the username. They found that tweets increased by a huge margin for the first few days then died off. There was an average of 1.69 tweets per user. The majority of users were individuals. Nearly all of the tweets were original. Organizations and celebrities posted more often than individuals. On average celebrities made far more impressions; they were also re-

tweeted more often and their tweets were more likely to include mentions. Individuals were more likely to direct a tweet to a specific person. Organizations and celebrities emphasized fundraisers, early detection, and diagnoses while individuals tweeted about wearing pink. Overall, Twitter is being used as a one-way communication tool to spread the message about breast cancer, particularly general awareness and fundraising, but nobody mentioned anything about the risks and consequences to breast cancer screening. Twitter is a huge platform of media in which one tweet can reach millions of people and every person is different due to their medical background, so with all the information being relayed it can easily be misleading and lead to the being blindsided about both sides of the story. This study is a cross-sectional study, so only looks at a certain time period, so a more a recent study or looking at the use of mass media over time may have improved overall but in the certain time period this study was done mass media was publicizing breast cancer screening to its full potential (Thackeray).⁶

One wrong decision for a patient can mean dealing with severe consequences for the rest of the lives. Overall media is a powerful method to raise awareness about breast cancer, but as we see in different forms of media, the cancer awareness campaigns raise awareness on what cancer is and how you should get tested, but there is no background information on who would be an ideal patient from a specific disease, why one should check, importance of understanding the risks. The campaigns for these medical advancements tend to mislead patients and may encourage them to make the wrong decisions.

Television

After exploring what breast cancer screening is, how it is represented through mass media and understanding the importance of relaying the full picture, now we can delve into a representation

⁶ Thackeray. *BMC Cancer* 13, no.1.

of this. A TV show is a medium, which creates a fictional world in which audience members connect to at an individual level. Every episode has a different impact on every person's life. This is also a great method of relaying information to the audience through these characters. Two such shows which relayed information about breast cancer screening, include *Sex and the City* and *Grey's Anatomy*. Through the analysis of these shows, one can understand the outcomes of media representation on audience members of breast cancer screening.

Sex and the City is a show that displayed an episode where the main character Samantha was diagnosed with Breast Cancer and how she dealt with the entire process. In this storyline one of the main characters Samantha was diagnosed and treated for breast cancer. Samantha finds out about this when she goes to the doctor for a breast augmentation consultation, the storyline then follows her as she is getting treated. A survey was done qualitatively to analyze what the audience had gained from this storyline and most of the viewers connected to the character in their own individual way. I noticed while reading the opinions of the viewers, most of them commented on being appreciative of introducing the topic breast cancer and how it is a serious matter. Others also commented on connecting with the pain Samantha went through as she went through her treatment, for example, chemotherapy, but no one really understood who is an ideal candidate for breast cancer or the benefits and the risks of breast cancer screening. The plot of the episode was mainly focused on what the patient went through after her diagnosis, but not during her diagnosis or even before her diagnosis. I believe this episode does a great job at starting the conversation about breast cancer, because it is a difficult topic to discuss, but I think it is important for the episode to also inform the viewers about what breast cancer screening is, why one should get it, what are the downsides of screening exams, etc. (Edwards) Although, this show was aired a long while back, therefore it did a great job with starting the conversation about

a topic not many people discussed back then. Allowing one of the main characters, who everyone is so connected to go through a huge medical treatment, allows people to become aware of their health and encourages patients to learn about a disease that is very common in many women. While, it is still important to realize that if the show did take a step to start the conversation, an extra step of informing audience members about breast cancer screening, the risks, benefits and which demographic has the most associated risks would be good information to relay to the audience members even though it may not be as exciting as having no risks or consequences.⁷

Now taking a look at a more recent show that I am a huge fan of, *Grey's Anatomy* and how a show can better display how this type of information can be relayed in a better way compared to the previous show discussed. In this television series, there is one episode where a young woman comes in with a difficult decision of choosing to undergo preventative surgery as a consequence of a positive BRCA1 test.”(Schmir & Linka Glatter, 2005) In the episode a character named Savvy has tested positive for the BRCA1 gene and also has a family history of breast and ovarian cancer, so she wants to remove her ovaries, breasts and uterus in order to reduce her risk in getting cancer. The doctors advise her to doublethink her decision because even though she has a family history that does not necessarily mean she has cancer. The doctors also lay out a couple of other options other than removing her female organs. Throughout the episode one of the resident doctors continuously advises her to rethink her options. The patient on the other hand has a firm mind and is set to do the surgery. Overall, I thought the episode did a good job creating an ideal case for breast and ovarian cancer, but lacked an emphasis on the complications of the surgery the patient was about to go through. Although the episode did not go too deeply into the risks, in contrast to most of the other mass media campaigns on breast

⁷ Gray, Jennifer B. *Communication Quarterly* 55, no. 4 (2007): 397-414

cancer, *Grey's Anatomy* did have a part of the storyline, which informed the viewers of complexities of preventative surgeries and importance of second opinions. Mentioning these key facts is great way for viewers to understand how any cancer screening or preventative surgeries do have drawbacks. Personally, it would have made a more of an impact if the storyline had spent a little bit more of an emphasis on this topic rather than the emphasis on the process of going ahead with the surgery due to the benefits.⁸

In the episode the couple comes in with a disagreement on the decision Savvy has taken about her BRCA 1 positive gene test result. The couple is friends with two doctors, one a neurologist, Shepard and the other a gynecologist, Allison. Savvy is able to convince her two friends and asks them to convince her husband to support her in the decision she has made. Already, the beginning scene is leaning more towards going ahead with the surgeries and focusing less of the possible risks of the decision the patient has decided to take. As the episode continues an intern doctor who has been put on her case does not seem to understand why Savvy is having the surgeries and tells her to reconsider her options. Even though for a moment Savvy reconsiders her decision, she is firm minded and chooses not to back out. I found the rest of the scenes in the episodes a good reminder for the audience to really understand that as a patient when you are volunteering to do an medical procedure it is important to consider all the other options and then go ahead with the procedure. The setback of this episode was not an emphasis on the risks; I do acknowledge Allison laid out the risks in the beginning of the episode in a firm tone, but afterwards the episode did not explore other options or alternatives with the patient continuously. The intern doctor also made it very clear to Savvy that she was not going to be able to experience motherhood, but in my opinion the episode told the story according to how the

^{8,9} Mimi Schmir, writer, "Let It Be," in *Grey's Anatomy*, Abc, November 13, 2005.

patient felt, which was being scared of getting breast cancer in the first place. I do not think the show did justice to exhaust all of the patient's treatment options, especially because the patient did not have breast cancer yet, she was only trying to prevent herself from having the disease. The episode should have emphasized the rate of patients who were tested positive for the BRCA1 gene but did not end up getting breast cancer or the rate of complications of the preventative surgery, because removing the most important organs in a female's body can lead to a variety of complications. When an audience member like myself watches this episode, what I have learned is if I have any family history of breast cancer, I should get tested for the BRCA1 gene and if I get a positive result be motivated to go through surgeries Savvy went through. I would not be as resistant to the surgery if the episode maybe showed an unsuccessful surgery or if the patient decided to go with a different option of preventative care for breast cancer. ⁹

Grey's Anatomy does a great job at relaying the important facts compared to Sex and the City, but if media maybe showed a story with complication resulting from breast cancer preventative care, this would help add perspective to the audience members, allows us to understand that sometimes not every story ends with a happy ending. Allowing audience members to see this will make this topic more real and will do justice to providing accurate information to possible breast cancer patients.

Television shows have such an impact on every individual's life, either they find a connection with a character or the story or the message. Each show can have a powerful impact on how a person chooses to live their life and whether we realize it or not the mass media has a huge impact of these decisions. How a story is relayed, what information is being passed to the audience members is so critical, that is why it is important to look at the implication of media in our lives and notice what a positive outcome of a well researched episode can be.

Conclusion

Mass Media is definitely the most powerful tool in communication nowadays, but really focusing on what information is being relayed and how it is relayed is extremely important for relaying the correct information to a patient. Medical tests are a huge tool to prevent certain diseases due to the new technological advancements, but taking that information, understanding the pros and cons is also essential for a patient to decide whether they want to go ahead with the test, so if different media platforms understand the effects of fabricating medical research and information, more information can be passed in a precise and accurate way.

Overall, when we analyze mass media, there are certain topics media relays to the information in a correct manner, but other topics are blown out of proportion or are not portrayed in the correct manner. Medical advancements is such a critical topic to discuss because, many times our culture is not ready to have a discussion about these topics publicly, this where media does a great job at starting the conversation. But, when you look deeper into how medical screening exams are portrayed you see a gap of information that is extremely important information that is not being passed to our culture. People talk about breast cancer screenings, but not many people know the basic facts. But, when information is passed in the correct manner, the media can make a powerful impact on our community; it can allow people to become aware of the health issues they probably had not considered before because it did not seem relevant.

Specifically, when looking at how mass media discusses breast cancer screening it is important to consider that breast cancer screening does have more benefits compared to risks. But, what is important to understand are the importance of risk, not just breast cancer screening itself, but after a patient gets diagnosed, the options that are available. Breast cancer preventative

surgeries are also important to understand and risks associated with the surgeries. The benefits may seem golden, but it is important for a patient to exhaust all of their options before considering a medical procedure. Many times, patients do not know all the information and may rely on media sources to inform themselves; therefore it is important for media to report factual information.

This paper did have limitations. Most of the sources, which were used, were not from the past couple of years; rather they dated back ten years or more. So the information discussed are how media has been portraying breast cancer screening in the past decade, I did not look at the change overtime and I think it would be interesting to see research done on change in media and how medical topics are being used. This paper also did not look at all forms of mass media. I only looked at two mediums of media, twitter and television shows. More mediums of media would give even a better understanding at how media discusses medical topics such as breast cancer screening.

It is important to understand that change is constantly occurring, everyday. And everyday new technological advances are occurring, new social media platforms, new shows are developing; in which people are becoming informed about the medical advances occurring in our world. Media has improved, as discussed in the paper, when comparing different mediums of media and their approaches, you can see how as time passes the media is doing its part to inform our culture about both the risks and benefits. Although, I think the media can still do much better when it comes to informing us about a medical topic. Media needs to stick more to the basic factual information, discussing basic risks and benefits and procedures instead of just starting the conversation about breast cancer. This improvement will create a huge impact on our culture and the decisions they make about their lifestyle and their health.

Bibliography

Primary Sources

Davis, Kevin C., Jennifer Uhrig, Douglas Rupert, Jami Frazee, Joshua Goetz, and Michael Slater.

"Effectiveness of a Mass Media Campaign in Promoting HIV Testing Information Seeking Among African American Women." *Journal of Health Communication* 16, no. 9 (2011): 1024-039. doi:10.1080/10810730.2011.571342.

Hether, Heather J., Grace C. Huang, Vicki Beck, Sheila T. Murphy, and Thomas W. Valente.

"Entertainment-Education in a Media-Saturated Environment: Examining the Impact of Single and Multiple Exposures to Breast Cancer Storylines on Two Popular Medical Dramas." *Journal of Health Communication* 13, no. 8 (2008): 808-23. doi:10.1080/10810730802487471.

Mimi Schmir, writer, "Let It Be," in *Grey's Anatomy*, Abc, November 13, 2005.

Ostergren, Jenny. "Unwarranted Optimism in Media Portrayals of Genetic Research on Addiction Overshadows Critical Ethical and Social Concerns". *Journal of Health Communication*(2015):555-65, July 30, 2016, doi:10.1080/10810730.2014.999895

Rimer, Barbara K. "Use of Multiple Media and Breast Cancer Screening: An Introduction." *Journal of Health Communication* 5, no. 2 (2000): 113-16. doi:10.1080/108107300406848.

S. Duffy. "Over diagnosis in Breast Cancer Screening: Methodological Considerations of Current Estimates." *Cancer Research Cancer Res* 71, no. 24 Supplement (2011). Doi:10.1158/0008-5472.sabcs11-s4-1.

Secondary Sources

Chen, Jian. "Stakeholders' positions in the breast screening debate, and media coverage of the debate: a qualitative study". *Critical Public Health*(2014): 62-72, July 30, 2016, doi: 10.1080/09581596.2013.788787

Gray, Jennifer B. "Interpersonal Communication and the Illness Experience in the Sex and the City Breast Cancer Narrative." *Communication Quarterly* 55, no. 4 (2007): 397-414. doi:10.1080/01463370701657889.

Thackeray, Rosemary, Scott H. Burton, Christophe Giraud-Carrier, Stephen Rollins, and Catherine R. Draper. "Using Twitter for Breast Cancer Prevention: An Analysis of Breast Cancer Awareness Month." *BMC Cancer* 13, no. 1 (2013). doi:10.1186/1471-2407-13-508