Study of Social-Media Acting as a Catalyst in Changing Health Communication: Study of Cancer Communication

¹Saima Pervez, ²Dr. Piyashi Dutta

Received: 29-November-2022 Revised: 10-January-2023 Accepted: 13-February-2023

¹Research Scholar, Amity School of Communication, Amity University, Noida, Email: saima_pervez_12@yahoo.co.in ²Assistant Professor, Amity School of Communication, Amity University, Noida, Email: piyashi.dutta@gmail.com

Abstract:

Long-term therapies and high levels of stress have lasting negative impacts on the self-esteem, familial function, marital role, and quality of life of the women. In this cross-sectional study, 100 Breast Cancer patients who were referred, AIIMS hospital New Delhi India between December 2020 and December 2021 were asked to fill out the data collection forms. According to the findings of this study, only the mean score on the social function component was substantially lower among social media users than among nonusers. Therefore, users of social media are less apprehensive and more inclined to communicate in their society. This paper focusses to analyze social media as an intervention tool towards cancer communication in changing health communication scenario in India.

Keywords: Social Media; Cancer Communication; Breast Cancer; Health

Introduction

The research by Globocon 2020 found that one woman in India is diagnosed with breast cancer every four minutes. It is an alarming fact, that death of women due to cancer is more in breast cancer than cervical cancer with an estimated 1,78,000 new cases diagnosed annually. The number of cases diagnosed in India due to breast cancer is 14%. GH might be seen as a release of pent-up emotions like despair, worry, or difficulties adjusting to new situations. It has been demonstrated that women's initial general health is a major predictor of pain throughout the follow-up in British Columbia. This suggests that identifying women at risk for future psychological difficulties might benefit from understanding the factors connected with higher GH levels at the time of diagnosis. These days, the vast majority of countries throughout the world use social media to some extent (Omidi, Z., et al.; Pew Research Center) (2020). Cancer prevention and treatment programmes are increasingly using various mediums of social media. Significantly, social media facilitates users' ability of generation, dissemination, & receiving data through bi- & multidirectional interactions that may cross national borders and provide anonymity. Multiple investigations have shown that factors like as age, stage of illness, educational qualification, status of their relationship, income, and the time that has passed since they were diagnosed are all linked with their general health (2020).

Breast cancer is quickly overtaking cervical cancer as the leading female malignancy in India. A woman in India receives a breast cancer diagnosis every four minutes, according to statistics. Breast cancer rates are rising throughout all of India, from the most remote villages to the largest cities. There were 87,010 fatalities and 1,62,468 new diagnoses of breast cancer in 2018 (Dey, S., and colleagues 2018). (2016).

Statement of the Problem

Low knowledge of the illnesses is one of the causes that leads to advanced stage diagnosis and ultimately death. Despite efforts from the government and several other groups, no progress has been made. The existing health care system is not geared to conduct face-to-face awareness campaigns on a wide scale. Consequently, there is an urgent need to create cost-efficient, easily accessible, and sustainable ways to address women's breast health care

requirements. In this case, social media participation is a possibility. However, there are still a lot of misconceptions about breast cancer and the therapies available for it, particularly among Asian women.

Aim & Objective of Study

Following objectives are framed to achieve the purpose of understanding the link between social media and the general health of breast cancer survivors:

1) To understand social media as an intervention tool towards cancer communication in changing health communication scenario in India.

2) To understand the effectiveness of the above in terms of enhancing the awareness about General health & well- being of Breast Cancer patients in India.

Literature Review

Triberti, S., et al., (2019), in their study shows that Breast cancer patients (and survivors) face daily challenges like disease-specific difficulties such as sexual and reproductive dysfunctions following hormone therapy and body image distortions after breast surgery, and issues like stress, anxiety, depression, etc. in order to maximize the effectiveness of treatment. Recent research has shown that eHealth or new technology can improve chronic illness management and quality of life. This study examines (1) the use and efficacy of "E-Health resources to enhance breast cancer patients/survivors' quality of life " and (2) if current interventions targeted breast cancer's particular features or used a general approach. PRISMA-guided literature search was done.

Diddi, P., & Lundy, L. K. (2017) state that physical exercise has the potential to improve the health of those who have survived the disease but are prone to illness due to less immunity and reduced health conditions. There are numerous research and studies available on the issue that explains how to help in improving the health and fitness of breast cancer survivors.

The process of therapy of cancer is linked to decreased physical activity, worsened physiological and psychological condition. During the therapy the patient losses nutrients and vitamins to a large extent which makes it difficult for them to have normal steady life as they used to have before the illness and the diagnosis. Thus, Health behavior modification programs for breast cancer survivors are prevalent because physical exercise improves health outcomes. (Pope, Z. C., et al., (2018).

Researchers have recently highlighted the potential benefits of social media for the survivors. It used to connect with the survivors to know their difficulties and struggles in coping with the disease. The digital platform functions a medium for distracting the patients from the disease and giving them opportunity to share their thoughts with other breast cancer survivors. Social media in this sense plays a crucial role in handling the mental stress and psychological trauma that every woman has to go through during and after the diagnosis and treatment of their disease. The moral support is provided to them by participation in the online forums and organizations and understanding what they are going through. A possible outcome of the involvement of social media can help the clinical treatment process by assisting the doctors to understand and analyze the mental status of their patients if the feedback on these media platform is retained and utilized in a proper way. (Falisi et al., 2017).

Attai, D. J., et al., (2015) in their research work finds that despite documented advantages, it's fairly uncommon for women to avoid breast cancer support groups. While there is no shortage of resources available online, there is no data to back up whether or not they really help. Here, we provide the results of a poll administered to members of a Twitter-based breast cancer support network which has helped to tackle issues faced by women who are suffering from breast cancer.

Research methodology

Study design and settings

The ongoing study focuses on 100 Breast Cancer individual patients who were receiving treatment in the AIIMS Delhi between December 2020 and December 2021 were asked to fill out the data collection forms. All patients gave their approval and voluntarily filled out the paperwork. Quantitative research design was used in this study.

Sample size

It was determined that 100 samples would be necessary to achieve statistical significance using the following parameters: level of confidence = 95%, reading power = 95%, utilizing the "G Power software version 3" under the two-way assumption, and r = 0.2. The analysis is done on the basis of the duration for which social media is used by the patients and their general health. However, after a 10% decline in the research.

Inclusion criteria

Patients with breast cancer who satisfied any of the following criteria were considered: 1) Possessing Internet use and membership in at least one social media platform 2) The ability and willingness to complete the survey. 3) All participants must be between age group of 30-50. 4) Patients with breast cancer who are being treated at a hospital that is part of the Lucknow Cancer Institute's network.

Exclusion criteria

The incapacity to work together as well as the loss of one's capability to utilize the internet constituted the grounds for exclusion.

Tool Used in the Study

The gathering of the data was divided into four distinct stages, the first of which focused on collecting the information. The history of cancer including the length of their treatment and any chemotherapy that they had, was covered in the second section. The utilization of social media platforms was the topic of the third section of the survey. Additionally, the "General Health Questionnaire" 28 constituted the fourth section (GHQ-28). In 1978, the Goldberg Institute created what is now known as GHQ. The "General Health Questionnaire (GHQ)" is a dependable questionnaire that is extensively utilized by the public; it has been translated into 38 languages and used in a variety of cultures. Questionnaire also covered question on if respondents feel that social media platforms are helpful for cancer communication information in changing health communication scenario.

Data analysis

For the purpose of analyzing the data gathered through the survey approach, SPSS 18 has been utilized. The researcher uses the frequency, mean, and standard deviation technique while doing the descriptive analysis. In the course of the analysis, both the t-test and the multiple regression analysis has been utilized.

Results & Analysis

Demographic analysis

Most of the female respondents were between 30 to 50 years of age and married and had graduate degree. "The main total GHQ score was 22.44 ± 12.86 , and majority of patients are classified as psychologically distressed since they score very low on GH. The mean scores for somatic symptoms, anxiety/insomnia, depression, and social dysfunction were 6.86 ± 4.02 , 7.14 ± 4.54 , 2.52 ± 3.47 , and 6.10 ± 3.07 , respectively".

Association between social media and General Health of Breast Cancer Patients

A large percentage of women were using social media tools and most popular among them were WhatsApp & Facebook, followed by Instagram, and Twitter. Results shows that respondents who were not using social media devices scored higher on four scales of GHQ. In a study comparing those who use social media to those who

don't, univariate analysis revealed that people who don't use social media have a much higher rate of social dysfunction "(6.68 2.87 vs. 7.87 3.22), and the difference was statistically significant (p 0.0001) In terms of the comparison between using SM for more than three hours and using it for less than three hours, there was an overall reduction in the mean scale of social dysfunction among SM users" who had used the product for less than three hours. On the other hand, the difference did not meet the criteria for statistical significance (p = 0.315, 22.70 12.48 vs. 23.21 10.17).

General health-related Parameters

The results of a multivariate logistic regression indicated that the use of "SM and working outside were positively linked with GH (odds ratio = 0.68, 95% confidence interval =0.29-1.59 and odds ratio =0.92, 95% confidence interval = 0.54-1.57, respectively). While female gender and the use of chemotherapy were both related with lower levels of GH (OR = 2.96, 95% CI = 0.74-11.72 and OR =1.47, 95% CI = 0.83-2.57). In addition, factors like as age, marital status, educational level", and the length of time a patient had the condition were not substantially linked with GH.

Compared to nonusers, "this study assessed the GH-related SM use among BC survivors and the sociodemographic variables associated with GH. BC is one of the most frequent malignancies among women and the second leading cause of death in Asian nations, behind lung cancer. Recent statistics indicate a rise in the incidence of breast cancer in India". This may have a devastating effect on many areas of one's life, such as one's relationships and one's ability to do one's work. Negative effects on women's sense of self-worth, family functioning, marital role, and quality of life have been shown to persist after long-term treatments and high levels of stress have ended. A person's general health is a major factor in determining the effectiveness of cancer therapy, especially for curable malignancies like breast cancer. In certain cases, the outpouring of emotion that characterizes GH state may be traced back to a lack of regulation. Consistent pain was shown to be strongly associated with initial GH in the follow-up of BC women.

Usage of social media for Cancer Communication Information

According to the findings of our survey, many people utilize the facilities provided by social media platforms for discussions pertaining to support (28%) and prevention (28%) respectively. Even while some tweets (approximately 18%) are about chemotherapy trial, hardly none of them are utilized for recruiting and almost none of them include links to websites where people can join. When it comes to cancer awareness, investigating how people perceive and communicate about their individual health challenges may be accomplished through the use of social media in a way that is both rich and hopeful.

Conclusion

Results shows that social media networks, and WhatsApp in particular, are highly related with the general health and social dysfunction of cancer patients. Consequently, social media networks can be viewed as a feasible tool for providing cancer patients with background information. In addition, the use of social media and working outside had a direct and good effect on the behavior of persons with cancer

Facebook groups have been a popular tool for raising awareness, finding support, and fundraising for causes relating to breast cancer. There are currently over one million people participating in these activities. In light of the widespread use and accessibility of social networking sites, there is a clear need for more study to investigate the potential of these platforms as a source of health information for people of all ages, ethnicities, and socioeconomic backgrounds.

References

1. Attai, D. J., Cowher, M. S., Al-Hamadani, M., Schoger, J. M., Staley, A. C., & Landercasper, J. (2015). Twitter social media is an effective tool for breast cancer patient education and support: patient-reported outcomes by survey. *Journal of medical Internet research*, *17*(7), e4721.

- 2. Dey, S., Sharma, S., Mishra, A., Krishnan, S., Govil, J., & Dhillon, P. K. (2016). Breast cancer awareness and prevention behavior among women of Delhi, India: identifying barriers to early detection. *Breast Cancer: Basic and Clinical Research*, *10*, BCBCR-S40358.
- 3. Diddi, P., & Lundy, L. K. (2017). Organizational Twitter use: content analysis of Tweets during breast cancer awareness month. *Journal of health communication*, 22(3), 243-253.
- 4. Falisi, A. L., Wiseman, K. P., Gaysynsky, A., Scheideler, J. K., Ramin, D. A., & Chou, W. Y. S. (2017). Social media for breast cancer survivors: a literature review. *Journal of cancer survivorship*, *11*(6), 808-821.
- 5. Mikal, J. P., Beckstrand, M. J., Parks, E., Oyenuga, M., Odebunmi, T., Okedele, O., ... & Horvath, K. (2020). Online social support among breast cancer patients: longitudinal changes to Facebook use following breast cancer diagnosis and transition off therapy. *Journal of Cancer Survivorship*, *14*(3), 322-330.
- 6. Omidi, Z., Kheirkhah, M., Abolghasemi, J., & Haghighat, S. (2020). Effect of lymphedema selfmanagement group-based education compared with social network-based education on quality of life and fear of cancer recurrence in women with breast cancer: a randomized controlled clinical trial. *Quality of Life Research*, 29(7), 1789-1800.
- 7. Pope, Z. C., Zeng, N., Zhang, R., Lee, H. Y., & Gao, Z. (2018). Effectiveness of combined smartwatch and social media intervention on breast cancer survivor health outcomes: a 10-week pilot randomized trial. *Journal of clinical medicine*, *7*(6), 140.
- 8. Triberti, S., Savioni, L., Sebri, V., & Pravettoni, G. (2019). eHealth for improving quality of life in breast cancer patients: a systematic review. *Cancer treatment reviews*, 74, 1-14.
- 9. https://www.thehindu.com/life-and-style/october-marks-breast-cancer-awareness-month-heres-what-we-need-to-know-and-do-to-keep-the-disease-away/article66030432.ece