

# **Cancer Awareness Campaigns Related to Plastic Surgeons: Striving for Pink Ribbon Success**

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## **BACKGROUND**

Cancer awareness campaigns are designed to educate the public and stimulate interests in particular cancers offering prevention strategies, advocacy and support systems. Breast cancer awareness month (BCAM) in October is the leading cancer awareness month, proving to generate national acknowledgement, interest and effectiveness of increasing patient prevention. In particular, plastic surgeons are a group of professionals associated with the successful promotion of BCAM. The specialty, however, works with a wide range of oncologic diseases and it is prudent to evaluate the success of those corresponding awareness months to increase their effectiveness. This study aims to analyze the efficacy of skin and head and neck cancer awareness campaigns using internet relative search volume as a representation of public interest.

## **METHODS**

Our study utilized Google Trends data to analyze relative search volume (RSV) by identifying the magnitude of searches relating to “skin cancer” and “head and neck cancer” between January 2010 and December 2017 (8 years). To demonstrate the efficacy of each awareness campaign, the mean baseline RSV was calculated, excluding the awareness month and the two neighboring months, and compared to the mean RSV during the respective awareness month. The trends for searches relating to “breast cancer” in the same time period were obtained for comparison. A t-test was performed to analyze the statistical significance of increased RSV during the awareness month of each respective cancer. Surveillance, Epidemiology, and End Results Program (SEER) was accessed in order to obtain the respective cancers incidences during this time for comparison.

## **RESULTS**

Skin cancer awareness month, as well as breast cancer awareness month, led to a statistically significant increase in RSV during their respective awareness months ( $p < 0.001$ ). The mean RSV for skin cancer exhibited a 35.5% increase from baseline during May, whereas the mean RSV for breast cancer exhibited a 185.5% increase from baseline in October. Head and neck cancer awareness month did not generate a statistically significant increase in RSV during its awareness month ( $p > 0.001$ ). Although, a 7.8% increase in RSV from baseline was noted for head and neck cancer during April.

## **CONCLUSION**

Skin cancer awareness campaigns generate an increase in skin cancer RSV, whereas head and neck cancer awareness campaigns did not increase head and neck cancer RSV. In comparison to breast cancer awareness campaigns, the increase in skin cancer RSV was greatly overshadowed. The results of this study suggest skin cancer awareness campaigns are efficacious, although there is room for improvement. Meanwhile, the results suggest head and neck cancer campaigns are not efficacious and demonstrate a need for novel approaches in stimulating public interest. In the patients and public best interests, plastic and reconstructive surgeons should assist the promotion and publicizing of the awareness months to reach the same success when compared to breast cancer.