

Chapter 6: Public Education: Building Awareness of MBC

Katherine Crawford-Gray¹

¹Metastatic Breast Cancer Alliance

Abstract

Breast cancer campaigns have heightened public awareness yet have propagated unexpected misinformation. **Methods:** We informally explored various aspects of misinformation around MBC. **Results:** The most persistent myths relate to the breast cancer “survivor,” which masks the reality that a proportion of women who have had early breast cancer will eventually develop metastatic disease. Further, the promotion of the “survivor” can stigmatize patients whose breast cancer progresses. The majority of adults in a recent survey reported they know little to nothing about MBC, that breast cancer in the advanced stages is curable, and that breast cancer progresses because patients did not take the right medicines or preventative measures. **Conclusions:** There is an opportunity for the Alliance to help ensure the facts about MBC are brought into the public awareness; to do so, a broad communication strategy should be informed by MBC patient advocates and developed drawing on Alliance member’s collective experience, resources and spheres of influence.

Discussion

The Alliance aims to build an understanding of MBC, and how it differs from early stage breast cancer, among those diagnosed, their families, HCPs, researchers, and health policy experts.

The past 30 years of breast cancer campaigns have been successful in shining the light on the disease, the importance of early detection, and the methods of screening. And yet with this heightened public awareness of “survivorship” has come unexpected misinformation. A 2014 Pfizer-sponsored study of more than 2000 adults in the general public found that 72% believed breast cancer in the advanced stages is curable if diagnosed early; 50% believe that breast cancer progresses because patients did not take the right medicine or preventative measures, and more than 60% said they knew little to nothing about MBC^[111].

The focus on fighting and beating breast cancer has led to the creation and dominance of the breast cancer “survivor”—an identity central to various public fundraising events, celebrity endorsements, and calls to action. This “survivor” identity masks the reality that 20-30% of women who have had early breast cancer will eventually develop metastatic disease^[112].

Campaigns with a focus on “the cure” distract from a research agenda to increase the quality and quantity of life for MBC patients. Drives based on “beating cancer” and survivorship also deny the fact that women who have early breast cancer can develop metastatic disease. Further, the promotion of the survivor stigmatizes patients whose breast cancer progresses; they are seen or may even see themselves at fault for the cancer’s progression, and ultimately failing to win the battle for survival.

“We did nothing wrong. Our medical team did nothing wrong. Metastatic breast cancer happens...at any time...regardless of your age, whether you did chemo[therapy], radiation, had a mastectomy, had a bilateral mastectomy, ate well, took vitamins, exercised regularly, prayed, had positive thoughts, had negative thoughts, got regular mammograms, did self exams religiously, had a tiny stage 1 primary tumor, or a stage 0 primary tumor, or a stage 3 primary tumor, or never even had primary breast cancer. It doesn’t matter.” — MBCN website www.mbcn.org

Nearly half of surveyed MBC patients report a sense of stigma, of feeling like outcasts or feeling isolated, especially within the larger social context of the breast cancer community.

Effects of stigmas and myths cannot be overstated. A global survey on perspectives about cancer determined that myths and stigma present significant challenges to cancer control, have a silencing effect, and affect individuals' behavior in seeking out support and making treatment and quality of life decisions^[113]. According to researchers, key aspects of stigma are secrecy, myths and misinformation, social rejection and isolation, and shame, self-blame and low self-esteem^[114]. These key elements are hallmarks of the MBC experience, within the breast cancer community and in the community at large. "When misfortune strikes, it is a natural human tendency to search for a reason," wrote psycho-oncologist Jimmie Holland. "The ready explanation is often 'he must have brought it on himself.' By blaming the victim, we get a false sense of security that we can prevent events that are beyond our control"^[115].

How can we, as an alliance of individual members, begin to challenge the myths and stigmas that cause fear in the breast cancer community and the larger public, resulting in financial, social, and emotional distress for people living with MBC? How do we reduce the isolation that many people with MBC feel? How can the Alliance focus its resources on educating different groups about MBC and the importance of helping those with MBC to live longer and better?" To address the lack of understanding of MBC, the Alliance will draw on our collective experience, resources, and spheres of influence. The following principles will guide our future efforts to build understanding across all spheres of MBC, including scientific and quality of life research, epidemiology, and information and support services:

- Our actions must be led by advocates and informed by research and evaluation if we are to change the landscape for people living with MBC.
- The Alliance will not duplicate efforts of individual member organizations of the Alliance.
- We value learning from other cancers and other diseases, so we can apply best practices to our work.
- People living with MBC come from diverse backgrounds; differing cultural values and belief systems must inform the provision of information and support services, as well as public education about the disease, treatments, and quality of life.
- Collaboration is essential. Advocate organizations and industry members of the Alliance will work together to learn from each other's experience and research.
- As our work is resource intensive and time consuming, we will be thoughtful in how we commit our assets to future campaigns.
- Developing an evaluation framework that goes beyond counting pamphlets, banners, press releases, radio announcements, and Facebook posts is an exciting challenge for the Alliance and one that will be a major part of our planning for 2015–2016.

References

1. Society, A.C., *American Cancer Society. Breast Cancer Facts & Figures 2013-2014*. Atlanta: American Cancer Society, Inc. . 2013.
2. Pal, S.K., *Lack of survival benefit in metastatic breast cancer with newer chemotherapy agents: The City of Hope cancer experience*. *Journal of Clinical Oncology*, 2008. 26(Supplement).
3. Mayer, M. and S.E. Grober, *Silent Voices: Women with Advanced (Metastatic) Breast Cancer Share Their Needs and Preferences for Information, Support, and Practical Resources*. 2006: Living Beyond Breast Cancer website.
4. Kroenke, K., et al., *The association of depression and pain with health-related quality of life, disability, and health care use in cancer patients*. *J Pain Symptom Manage*, 2010. 40(3): p. 327-41.
5. Hanahan, D. and R.A. Weinberg, *Hallmarks of cancer: the next generation*. *Cell*, 2011. 144(5): p. 646-74.
6. Steeg, P.S., *Tumor metastasis: mechanistic insights and clinical challenges*. *Nat Med*, 2006. 12(8): p. 895-904.
7. Fidler, I.J., *The pathogenesis of cancer metastasis: the 'seed and soil' hypothesis revisited*. *Nat Rev Cancer*, 2003. 3(6): p. 453-8.
8. Institute, N.C., *National Cancer Institute Fact Sheet: Targeted Cancer Therapies*. 2014.
9. ICRP. *International Cancer Research Partnership*. Available from: <http://www.icrpartnership.org/>.
10. ICRP, *Cancer Research Funding from an International Perspective*, L. Davies, Editor. 2012, *International Cancer Research Partnership*.
11. O'Toole, L., P. Nurse, and G. Radda, *An analysis of cancer research funding in the UK*. *Nat Rev Cancer*, 2003. 3(2): p. 139-43.
12. Nurse, P., et al., *Cancer research: joint planning for the future*. *Ann Oncol*, 2003. 14(11): p. 1593-4.
13. Myers, E.R., et al., *Similarities and differences in philanthropic and federal support for medical research in the United States: an analysis of funding by nonprofits in 2006-2008*. *Acad Med*, 2012. 87(11): p. 1574-81.
14. TBCRC. *Translational Breast Cancer Research Consortium*. Available from: <http://pub.emmes.com/study/bcrc/>.
15. Eccles, S.A., et al., *Critical research gaps and translational priorities for the successful prevention and treatment of breast cancer*. *Breast Cancer Res*, 2013. 15(5): p. R92.
16. Criscitiello, C., et al., *Biopsy confirmation of metastatic sites in breast cancer patients: clinical impact and future perspectives*. *Breast Cancer Res*, 2014. 16(2): p. 205.
17. Sleeman, J. and P.S. Steeg, *Cancer metastasis as a therapeutic target*. *Eur J Cancer*, 2010. 46(7): p. 1177-80.
18. Steeg, P.S., *Perspective: The right trials*. *Nature*, 2012. 485(7400): p. S58-9.
19. Hanahan, D., *Rethinking the war on cancer*. *Lancet*, 2014. 383(9916): p. 558-63.
20. Sledge, G.W., et al., *A dickens tale of the treatment of advanced breast cancer: the past, the present, and the future*. *Am Soc Clin Oncol Educ Book*, 2012: p. 28-38.
21. Floor, S.L., et al., *Hallmarks of cancer: of all cancer cells, all the time?* *Trends Mol Med*, 2012. 18(9): p. 509-15.
22. Hu, J., et al., *Antitelomerase therapy provokes ALT and mitochondrial adaptive mechanisms in cancer*. *Cell*, 2012. 148(4): p. 651-63.

23. Bergers, G. and D. Hanahan, *Modes of resistance to anti-angiogenic therapy*. Nat Rev Cancer, 2008. 8(8): p. 592-603.
24. Bottsford-Miller, J.N., R.L. Coleman, and A.K. Sood, *Resistance and escape from antiangiogenesis therapy: clinical implications and future strategies*. J Clin Oncol, 2012. 30(32): p. 4026-34.
25. Dogan, S., F. Andre, and M. Arnedos, *Issues in clinical research for metastatic breast cancer*. Curr Opin Oncol, 2013. 25(6): p. 625-9.
26. Stead, M., et al., *Strengthening clinical cancer research in the United Kingdom*. Br J Cancer, 2011. 104(10): p. 1529-34.
27. Research, L.C., *Ludwig Cancer Research bestows half a billion in new funding to six eminent U.S. research institutions* 2014.
28. Foundation, B.C.R., *Founder's Fund*. 2014.
29. Visco, F., *Breast Cancer Deadline 2020 3rd Annual Progress Report*. 2014.
30. Howlader N, N.A., Krapcho M, Garshell J, Miller D, Altekruse SF, Kosary CL, Yu M, Ruhl J, Tatalovich Z, Mariotto A, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). *SEER Cancer Statistics Review, 1975-2011, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2011/, based on November 2013 SEER data submission, posted to the SEER web site, April 2014*. N.A. Howlader N, Krapcho M, Garshell J, Miller D, Altekruse SF, Kosary CL, Yu M, Ruhl J, Tatalovich Z, Mariotto A, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). Editor. 2014.
31. McCorkle, R., et al., *Self-management: Enabling and empowering patients living with cancer as a chronic illness*. CA Cancer J Clin, 2011. 61(1): p. 50-62.
32. Karamouzis, M.V., G. Ioannidis, and G. Rigatos, *Quality of life in metastatic breast cancer patients under chemotherapy or supportive care: a single-institution comparative study*. Eur J Cancer Care (Engl), 2007. 16(5): p. 433-8.
33. Holland, J.C., *History of psycho-oncology: overcoming attitudinal and conceptual barriers*. Psychosom Med, 2002. 64(2): p. 206-21.
34. Network, N.C.C. *NCCN Distress Thermometer for Patients. National Comprehensive Cancer Network website*. 2014 August 11, 2014]; Available from: http://www.nccn.org/patients/resources/life_with_cancer/pdf/nccn_distress_thermometer.pdf.
35. Adler, N.E., et al., *Cancer Care for the Whole Patient*, A.E.K. Page, Editor. 2007: Institute of Medicine, National Academies.
36. Tatla, R., et al., *A review of clinical endpoints and use of quality-of-life outcomes in phase III metastatic breast cancer clinical trials in Thirty-Fifth Annual CTRC-AACR San Antonio Breast Cancer Symposium*. 2012, Cancer Research San Antonio, TX. p. P2-12-07.
37. Office of Communications, D.o.D.I., Food and Drug Administration, *Guidance for Industry Patient-Reported Outcome Measures: Use in Medical Product Development to Support Labeling Claims*. 2009, Food and Drug Administration: FDA Website.
38. Levit, L., et al., *Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis*. 2013, National Academy of Science: Institute of Medicine, The National Academies.
39. Aranda, S., et al., *Mapping the quality of life and unmet needs of urban women with metastatic breast cancer*. Eur J Cancer Care (Engl), 2005. 14(3): p. 211-22.
40. Caplette-Gingras, A. and J. Savard, *Depression in women with metastatic breast cancer: a review of the literature*. Palliat Support Care, 2008. 6(4): p. 377-87.
41. Turner, J., et al., *Psychosocial impact of newly diagnosed advanced breast cancer*. Psychooncology, 2005. 14(5): p. 396-407.
42. Grabsch, B., et al., *Psychological morbidity and quality of life in women with advanced breast cancer: a cross-sectional survey*. Palliat Support Care, 2006. 4(1): p. 47-56.

43. Kissane, D.W., et al., *Psychiatric disorder in women with early stage and advanced breast cancer: a comparative analysis*. Aust N Z J Psychiatry, 2004. 38(5): p. 320-6.
44. Seah, D.S., et al., *Informational needs and psychosocial assessment of patients in their first year after metastatic breast cancer diagnosis*, in *San Antonio Breast Cancer Symposium*. 2012, Cancer Research: San Antonio, TX.
45. Hall, A., L. Fallowfield, and R. A'Hern, *When Breast Cancer Recurs: A 3-Year Prospective Study of Psychological Morbidity*. The Breast Journal, 1996. 2(3): p. 197-203.
46. Warren, M., *Uncertainty, lack of control and emotional functioning in women with metastatic breast cancer: a review and secondary analysis of the literature using the critical appraisal technique*. Eur J Cancer Care (Engl), 2010. 19(5): p. 564-74.
47. Kashdan, T.B. and J. Rottenberg, *Psychological flexibility as a fundamental aspect of health*. Clin Psychol Rev, 2010. 30(7): p. 865-78.
48. Fulton, C., *Patients with metastatic breast cancer: their physical and psychological rehabilitation needs*. Int J Rehabil Res, 1999. 22(4): p. 291-301.
49. Kershaw, T., et al., *Coping strategies and quality of life in women with advanced breast cancer and their family caregivers*. Psychology and Health, 2004. 19(S1): p. 139-155.
50. Luoma, M.L. and L. Hakamies-Blomqvist, *The meaning of quality of life in patients being treated for advanced breast cancer: a qualitative study*. Psychooncology, 2004. 13(10): p. 729-39.
51. Kenne Sarenmalm, E., et al., *Coping with recurrent breast cancer: predictors of distressing symptoms and health-related quality of life*. J Pain Symptom Manage, 2007. 34(1): p. 24-39.
52. Northouse, L.L., G. Dorris, and C. Charron-Moore, *Factors affecting couples' adjustment to recurrent breast cancer*. Soc Sci Med, 1995. 41(1): p. 69-76.
53. Cheung, W.Y., L.W. Le, and C. Zimmermann, *Symptom clusters in patients with advanced cancers*. Support Care Cancer, 2009. 17(9): p. 1223-30.
54. Brennan, J., *Adjustment to cancer - coping or personal transition?* Psychooncology, 2001. 10(1): p. 1-18.
55. Oh, S., et al., *Quality of life of breast cancer survivors after a recurrence: a follow-up study*. Breast Cancer Res Treat, 2004. 87(1): p. 45-57.
56. Mayer, M., et al., *Assessment of burden of illness of women with HER2+ metastatic breast cancer: The results of a community-based survey*, in *ASCO Annual Meeting*. 2011, Journal of Clinical Oncology: Chicago, IL.
57. Mayer, M. and S.E. Grober, *Patient Perspectives on Control of Symptoms and Side Effects of Metastatic Breast Cancer*, in *ABC2: Advanced Breast Cancer Second Consensus Conference*. 2013: Lisbon, Portugal.
58. Corneliussen-James, D., *International survey identifies key support and lifestyle needs of metastatic breast cancer (MBC) patients*, in *ABC1: Advanced Breast Cancer First Consensus Conference*. 2011: Lisbon, Portugal.
59. Rowe, J., *Surveying young women with metastatic breast cancer to create interventions with impact.*, in *ABC2: Advanced Breast Cancer Second Consensus Conference*. 2013: Lisbon, Portugal.
60. Mayer, M., et al., *Living with metastatic breast cancer: a global patient survey*. Community Oncology, 2010. 7(9): p. 406-413.
61. Buzaglo, J., *Cancer Experience Registry: Metastatic Breast Cancer, Update to the National Advisory Council*, in *Cancer Support Community*. 2014: Washington, D.C.
62. Willis, K., et al., *The Experience of Living With Metastatic Breast Cancer-A Review of the Literature*. Health Care Women Int, 2014: p. 1-29.
63. Kissane, D.W., *The relief of existential suffering*. Arch Intern Med, 2012. 172(19): p. 1501-5.

64. Irvin, W., Jr., H.B. Muss, and D.K. Mayer, *Symptom management in metastatic breast cancer*. *Oncologist*, 2011. 16(9): p. 1203-14.
65. Brothers, B.M. and B.L. Andersen, *Hopelessness as a predictor of depressive symptoms for breast cancer patients coping with recurrence*. *Psychooncology*, 2009. 18(3): p. 267-75.
66. Charmaz, K., *Good Days, Bad Days: The self in chronic illness and time*. Vol. 1. 1991: Rutgers University Press. 324.
67. Bell, K. and S. Ristovski-Slijepcevic, *Metastatic cancer and mothering: being a mother in the face of a contracted future*. *Med Anthropol*, 2011. 30(6): p. 629-49.
68. Griffiths, K.M., A.L. Calear, and M. Banfield, *Systematic review on Internet Support Groups (ISGs) and depression (1): Do ISGs reduce depressive symptoms?* *J Med Internet Res*, 2009. 11(3): p. e40.
69. Lieberman, M.A., et al., *Electronic support groups for breast carcinoma: a clinical trial of effectiveness*. *Cancer*, 2003. 97(4): p. 920-5.
70. Eysenbach, G., et al., *Health related virtual communities and electronic support groups: systematic review of the effects of online peer to peer interactions*. *BMJ*, 2004. 328(7449): p. 1166.
71. Goodwin, P.J., et al., *The effect of group psychosocial support on survival in metastatic breast cancer*. *N Engl J Med*, 2001. 345(24): p. 1719-26.
72. Northouse, L.L., D. Laten, and P. Reddy, *Adjustment of women and their husbands to recurrent breast cancer*. *Res Nurs Health*, 1995. 18(6): p. 515-24.
73. Mayer, M., *Lessons learned from the metastatic breast cancer community*. *Semin Oncol Nurs*, 2010. 26(3): p. 195-202.
74. Lazarus, R.S., *Coping theory and research: past, present, and future*. *Psychosom Med*, 1993. 55(3): p. 234-47.
75. Fallowfield, L., et al., *Identifying Barriers Preventing Clinical Trials Enrollment: Results of a Global Survey of Patients with Metastatic Breast Cancer, in AACR Annual Conference*. 2009: Denver, CO.
76. Gattellari, M., et al., *When the treatment goal is not cure: are cancer patients equipped to make informed decisions?* *J Clin Oncol*, 2002. 20(2): p. 503-13.
77. Jenkins, V., L. Fallowfield, and J. Saul, *Information needs of patients with cancer: results from a large study in UK cancer centres*. *Br J Cancer*, 2001. 84(1): p. 48-51.
78. Hack, T.F., et al., *The communication goals and needs of cancer patients: a review*. *Psychooncology*, 2005. 14(10): p. 831-45; discussion 846-7.
79. Harding, V., et al., *'Being there' for women with metastatic breast cancer: a pan-European patient survey*. *Br J Cancer*, 2013. 109(6): p. 1543-8.
80. Smith, M.L., et al., *Preferences of patients with metastatic breast cancer*, in *2011 ASCO Annual Meeting*. 2011, Journal of Clinical Oncology: Chicago, IL.
81. Smith, M.L., et al., *Examining patient choices for metastatic breast cancer drugs*, in *2012 ASCO Annual Meeting*. 2012, Journal of Clinical Oncology: Chicago, IL.
82. Cheville, A.L., et al., *Prevalence and treatment patterns of physical impairments in patients with metastatic breast cancer*. *J Clin Oncol*, 2008. 26(16): p. 2621-9.
83. Portenoy, R.K. and P. Lesage, *Management of cancer pain*. *Lancet*, 1999. 353(9165): p. 1695-700.
84. Butt, Z., et al., *Fatigue is the most important symptom for advanced cancer patients who have had chemotherapy*. *J Natl Compr Canc Netw*, 2008. 6(5): p. 448-55.
85. Hwang, S.S., et al., *Multidimensional independent predictors of cancer-related fatigue*. *J Pain Symptom Manage*, 2003. 26(1): p. 604-14.

86. Bennett, B., et al., *Fatigue and psychological distress--exploring the relationship in women treated for breast cancer*. *Eur J Cancer*, 2004. 40(11): p. 1689-95.
87. Stone, P., *The measurement, causes and effective management of cancer-related fatigue*. *Int J Palliat Nurs*, 2002. 8(3): p. 120-8.
88. Palesh, O.G., et al., *A longitudinal study of depression, pain, and stress as predictors of sleep disturbance among women with metastatic breast cancer*. *Biol Psychol*, 2007. 75(1): p. 37-44.
89. Carroll, J.K., et al., *Pharmacologic treatment of cancer-related fatigue*. *Oncologist*, 2007. 12 Suppl 1: p. 43-51.
90. Fiorentino, L. and S. Ancoli-Israel, *Insomnia and its treatment in women with breast cancer*. *Sleep Med Rev*, 2006. 10(6): p. 419-29.
91. Jagsi, R., et al., *Long-term financial burden of breast cancer: experiences of a diverse cohort of survivors identified through population-based registries*. *J Clin Oncol*, 2014. 32(12): p. 1269-76.
92. Neugut, A.I., et al., *Association between prescription co-payment amount and compliance with adjuvant hormonal therapy in women with early stage breast cancer*. *J Clin Oncol*, 2011. 29(18): p. 2534-42.
93. Zafar, S.Y., et al., *The financial toxicity of cancer treatment: a pilot study assessing out-of-pocket expenses and the insured cancer patient's experience*. *Oncologist*, 2013. 18(4): p. 381-90.
94. Ramsey, S., et al., *Washington State cancer patients found to be at greater risk for bankruptcy than people without a cancer diagnosis*. *Health Aff (Millwood)*, 2013. 32(6): p. 1143-52.
95. Buzaglo, J., et al., *Work-related impact of metastatic breast cancer: Results from the Cancer Experience Registry*, in *7th Biennial Cancer Survivorship Research Conference*. 2014: Atlanta, GA.
96. Yang, H.C., et al., *Surviving recurrence: psychological and quality-of-life recovery*. *Cancer*, 2008. 112(5): p. 1178-87.
97. English, R.A., Y. Lebovitz, and R.B. Giffin, *Transforming Clinical Trials in the United States: Challenges and Opportunities. A workshop summary*. 2010.
98. Duggan, M., *Pew Research Internet Project, Cell Phone Activities 2013: Additional Demographics*, in *Pew Research Internet Project*. 2013: Pew Research.
99. DeSantis, C.E., et al., *Cancer treatment and survivorship statistics, 2014*. *CA Cancer J Clin*, 2014. 64(4): p. 252-71.
100. Clements, M.S., et al., *Estimating prevalence of distant metastatic breast cancer: a means of filling a data gap*. *Cancer Causes Control*, 2012. 23(10): p. 1625-34.
101. Fiteni, F., et al., *Long-term survival of patients with HER2 metastatic breast cancer treated by targeted therapies*, in *Thirty-Fifth Annual CTSC-AACR San Antonio Breast Cancer Symposium*. 2012, Cancer Research: San Antonio, TX.
102. Dawood, S., et al., *Survival differences among women with de novo stage IV and relapsed breast cancer*. *Ann Oncol*, 2010. 21(11): p. 2169-74.
103. Dawood, S., et al., *Trends in survival over the past two decades among white and black patients with newly diagnosed stage IV breast cancer*. *J Clin Oncol*, 2008. 26(30): p. 4891-8.
104. Chia, S.K., et al., *The impact of new chemotherapeutic and hormone agents on survival in a population-based cohort of women with metastatic breast cancer*. *Cancer*, 2007. 110(5): p. 973-9.
105. Giordano, S.H., et al., *Is breast cancer survival improving?* *Cancer*, 2004. 100(1): p. 44-52.
106. Ruiterkamp, J., et al., *Improved survival of patients with primary distant metastatic breast cancer in the period of 1995-2008. A nationwide population-based study in the Netherlands*. *Breast Cancer Res Treat*, 2011. 128(2): p. 495-503.

107. Ernst, M.F., et al., *Trends in the prognosis of patients with primary metastatic breast cancer diagnosed between 1975 and 2002*. *Breast*, 2007. 16(4): p. 344-51.
108. Andre, F., et al., *Breast cancer with synchronous metastases: trends in survival during a 14-year period*. *J Clin Oncol*, 2004. 22(16): p. 3302-8.
109. Pal, S.K., et al., *Impact of modern chemotherapy on the survival of women presenting with de novo metastatic breast cancer*. *BMC Cancer*, 2012. 12: p. 435.
110. Tevaarwerk, A.J., et al., *Survival in patients with metastatic recurrent breast cancer after adjuvant chemotherapy: little evidence of improvement over the past 30 years*. *Cancer*, 2013. 119(6): p. 1140-8.
111. Pfizer, *Breast Cancer Survey*. 2014: ASCO Meeting.
112. O'Shaughnessy, J., *Extending survival with chemotherapy in metastatic breast cancer*. *Oncologist*, 2005. 10 Suppl 3: p. 20-9.
113. Neal, C., *Cancer Stigma and Silence Around the World*. 2007.
114. Else-Quest, N.M., et al., *Perceived stigma, self-blame, and adjustment among lung, breast and prostate cancer patients*. *Psychol Health*, 2009. 24 (8): 949-64.
115. Holland, J.C., et al., *The human side of cancer: living with hope, coping with uncertainty*. *Oncology*, 2001. 15:8.
116. HINTS Health Information National Trends Survey: HINTS 4, Cycle 3 (2013) demographics. <http://hints.cancer.gov/topic.aspx?section=Demographics>. Accessed September 29, 2014.

The Public Education & Awareness Committee oversees programs and initiatives to inform, educate, and engage the general public and students to advance knowledge and help people everywhere realize the benefits of human genetics and genomics research. Works to enhance ASHG members' skills and motivation to engage in public communication and education activities. Helps develop Annual Meeting events and year-round programs that inform and engage ASHG members in public education, awareness and engagement. Provides input on media relations planning for Annual Meeting. Helps identify key concepts Learn how the Building Effective Teams Educational Competency training can empower educators to create strong teams and help them achieve their goals. Builds cohesive teams of people within the organization, valuing team spirit. Simultaneously develops and manages numerous productive teams within an organization. Acknowledges wins and successes for the team. PDF | Environmental education has an effective role in creating healthy awareness and preparing suitable environment for the development and maintenance | Find, read and cite all the research you need on ResearchGate. Environmental education can implant incentives and goals and build skills. which change the human behavior and attitude and call for participation and reaction. with the environment as a whole. More considerations should be taken to implement. environmental education and fill the gaps, starting from preschool level to higher. education and including the whole public at the local level. Environmental awareness. is the suitable tool for conservation of our natural resources and their valuable. Second, public education is the greatest way to improve the overall health of our children and their communities. Third, education provides education, and without education our society will crumble. In order to improve our educational system, we must look at what is the importance of public education. Not only is education important but so is the availability of a quality education. With an adequate education, the risk of students committing crimes and getting involved in illegal activities is dramatically reduced. CONSUMER EDUCATION. GOAL: Increase public awareness of MBC's mission, activities and services. Desired Outcome. Patients are able to make informed decisions about medical practitioners and unlicensed practitioners and know how to seek remedies through accessible information provided by the Medical Board. Performance Indicator. Align relationship-building activities with communication plan priorities. Completion Status Working with a variety of organizations on legislation. Working with a variety of organizations on legislation.