Changing the
Landscape for
People Living
with Metastatic
Breast Cancer





together we are stronger than the disease

Metastatic Breast Cancer Landscape Analysis: Research Report October 2014



MBC Alliance members:

From bottom right: Katherine Crawford-Gray, MBC Alliance Project Director; Christine Benjamin, SHARE; Elly Cohen, BreastCancerTrials.org; Jo Dulay, Genentech; Janine Guglielmino, Living Beyond Breast Cancer; Jane Levy, CancerCare; Elyse Spatz Caplan, Novartis Oncology; Michael Zincone, Pfizer; Musa Mayer, AdvancedBC.org; Julissa Viana, Cara Thompson, Celgene Corporation; Margaret (Peg) Mastrianni, Breast Cancer Research Foundation; Christine Wilson, Triple Negative Breast Cancer Foundation; Shirley Mertz, Metastatic Breast Cancer Network, Stacy Lewis, Young Survival Coalition; Katherine O'Brien, Virginia (Ginny) Knackmuhs, Metastatic Breast Cancer Network; Megan McCann, Young Survival Coalition; Catherine Ormerod, Living Beyond Breast Cancer; Lisa Schlager, Facing Our Risk of Cancer Empowered (FORCE); Kimberly Sabelko, Susan G. Komen; Marc Hurlbert, Avon Foundation for Women; Virginia (Ginny) Mason, Inflammatory Breast Cancer Research Foundation; Hayley Dinerman, Triple Negative Breast Cancer Foundation; Diane Rose, FORCE; Susan Brown, Susan G. Komen; Allison Harvey, Cancer Support Community; Stephanie Reffey, Susan G. Komen; Kerry Gruninger, SHARE; Jane Perlmutter, Consultant; Amy Bonoff, Dr. Susan Love Research Foundation

Photographer: Yasmeen Anderson Photography

Members absent from photo as of March 2014: Christine Verini, Eisai; Kelly P. Hodges , Sisters Network® Inc.; Hope Wohl, Breastcancer.org; Elda Railey, Mary Lou Smith, Research Advocacy Network



together we are stronger than the disease

Our Vision

MBC Alliance members are driven by a vision to transform and improve the lives of people living with metastatic breast cancer.

Our Mission

The MBC Alliance unifies the efforts of its members to improve the lives of and outcomes for those living with metastatic breast cancer and their families through increasing awareness and education about the disease and advancing policy and strategic coordination of research funding specifically focused on metastasis that has the potential to extend life, enhance quality of life, and ultimately to cure.

Metastatic Breast Cancer MBCallance>

together we are stronger than the disease

BreastCancerTrials.org
Genentech

Dr. Susan Love Research Foundation Triple Step Toward the Cure

Research Advocacy Network Susan G. Komen

Sisters® Network Inc.

































Breastcancer.org Living Beyond Breast Cancer

Celgene Corporation Eisai **Novartis Oncology Sharsheret Triple Negative Breast Cancer Foundation**

ACS CAN Cancer Support Community Nueva Vida

> **Patient** Advocate **Foundation**

AdvancedBC.org

Avon Foundation for Women

Breast Cancer Research Foundation

Cancer Care

Metastatic Breast Cancer Network

Pfizer

SHARE

Young Survival Coalition

































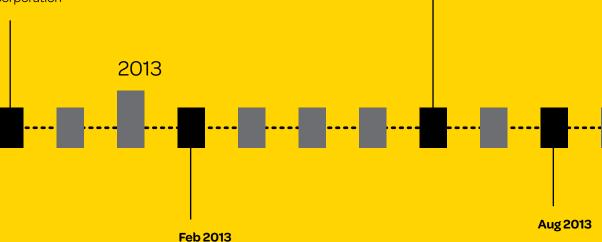
MBC Alliance

Nov 2012

Breast cancer nonprofits join MBC advocates to discuss how to increase MBC awareness and improve the lives of people living with MBC; all agree that through collaboration, far more can be achieved than by individual organizations; MBC Alliance is formed with support from Celgene Corporation

Jun 2013

Mission and goals are adopted; governance approaches are considered; landscape analysis is identified as first initiative; Breastcancer.org, Breast Cancer Research Foundation, Genentech, and Pfizer join

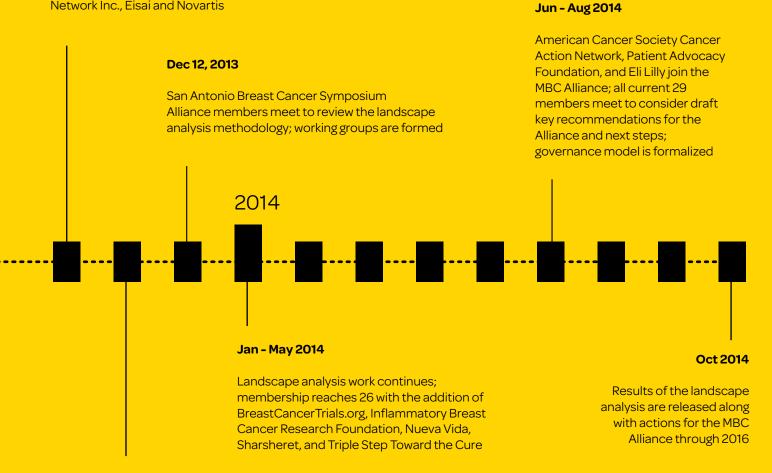


Early members are AdvancedBC.org, Cancer Support Community, FORCE, Living Beyond Breast Cancer, Metastatic Breast Cancer Network, Research Advocacy Network, SHARE, Susan G. Komen, Triple Negative Breast Cancer Foundation, and Young **Survival Coalition**

Avon Foundation for Women becomes the Alliance's administrative home with Dr. Marc Hurlbert as project leader

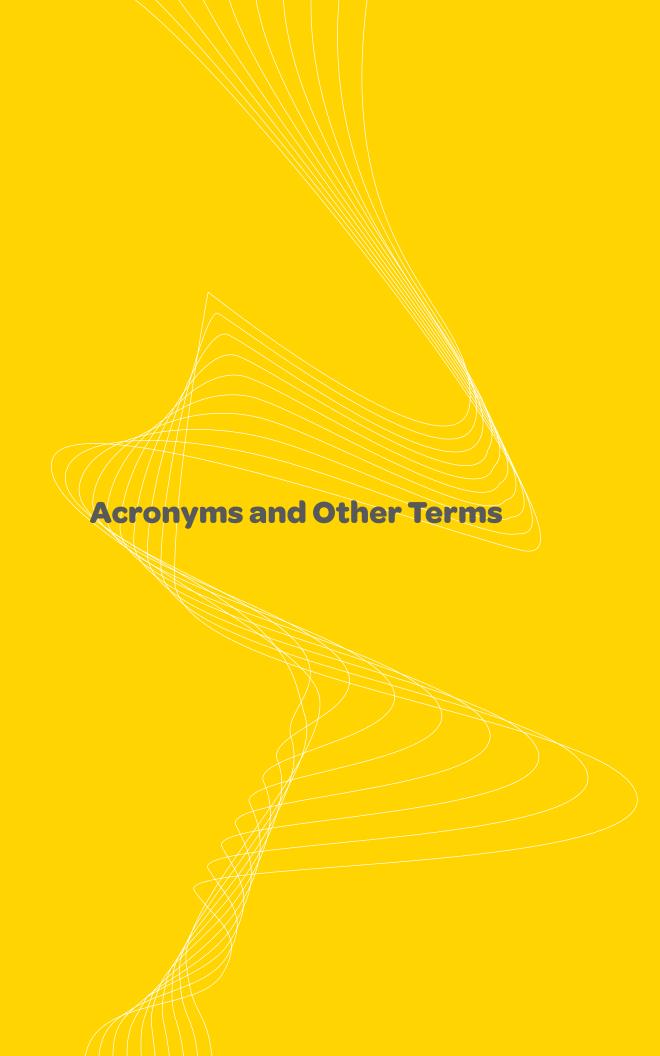
Oct 2013

MBC Alliance launches on National Metastatic Breast Cancer Awareness Day; members now include Cancer Care, Dr. Susan Love Research Foundation, Sisters Network Inc., Eisai and Novartis



Nov 2013

MBC Alliance project director is appointed; work begins on the landscape analysis; all members meet for the first time



advanced breast cancer includes both metastatic breast cancer and locally advanced breast cancer

(stage III) and locally recurrent breast cancer

Akt a serine/threonine-specific protein kinase

BRCA mutation mutation in the tumor-suppressor gene BRCA1 or BRCA2,

associated with hereditary breast cancer

CSO Common Scientific Outline (www.icrpartnership.org/CSO.cfm)

de novo MBC breast cancer that is metastatic at the time of *first* diagnosis

ER- estrogen receptor negative/hormone insensitive breast cancer

ER+ estrogen receptor positive/hormone sensitive breast cancer

ErbB epidermal growth factor receptor (protein family)

gHRAsp Grants in the Health Research Alliance Shared Portfolio (www.ghrasp.org),

HCPs HCPs

HER2 human epidermal growth factor receptor 2

hormone-sensitive MBC MBC where tumor growth is promoted by estrogen and/or progesterone

HRA Health Research Alliance

ICRP International Cancer Research Partnership

incidence Rate of occurrence of new cases in the population (measure risk of

developing a disease)

IOM Institute of Medicine

KOL key opinion leader

MBC metastatic breast cancer

MBC Alliance Metastatic Breast Cancer Alliance (also called the Alliance)

mTOR mechanistic target of rapamycin (serine/threonine protein kinase)

NCI National Cancer Institute

PDQ Physician Data Query

PI3K phosphatidylinositide 3-kinase

prevalence proportion of cases in the population (measures how widespread the disease is)

RECIST Response Evaluation Criteria in Solid Tumors

SEER Surveillance, Epidemiology, and End Results program of the

National Cancer Institute (NCI)

stage IV breast cancer another term for metastatic breast cancer

TBCRC Translational Breast Cancer Research Consortium

TN MBC triple-negative (hormone insensitive and HER2-negative) metastatic breast cancer

TNBC triple-negative (hormone insensitive) breast cancer

US United States





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.



Chapter 7: Analysis to Action

The analysis undertaken by the MBC Alliance over the past year has prepared a solid foundation of shared knowledge across the MBC landscape. Collectively, Alliance members are now better informed about the areas of scientific research needing further exploration, gaps in information and support services that require resources, the need to accelerate improvement in quality of life, and increasing evidence-based public education about MBC.

Actions for the next phase of work for the Alliance have been prepared based on the research from this landscape analysis and the many discussions with patient advocates and breast cancer organizations.

We have identified a series of actions for our next phase of work over 2015 and 2016. These actions are aligned with our goals of advancing research, increasing understanding, and improving knowledge and awareness of MBC. They require sustained commitment of multiple stakeholders and MBC Alliance members stand ready to contribute time and energy to this work.

We look forward to reporting on our progress in 2015.

GOALS, ACTIONS

advance research

GOAL 1

Advance research focused on extending life, enhancing quality of life, and ultimately ending death from MBC

MBC Alliance Think Tanks (2015)

Convene small think tanks of experts and advocates to investigate the data from the landscape analysis and prioritize research gaps.

MBC Summit (2016)

Convene summit of scientists and medical experts from the private and public sectors, along with patients to identify collaborative approaches for metastatic research.

Clinical Trials

Advocate for new trial designs incorporating new end points.

Assess feasibility of establishing a national tissue registry of paired primary and MBC tissue and blood for use by all researchers.

improve knowledge + access

GOAL 2

Improve knowledge by ensuring all patients and their caregivers know how to and can access the care and services they need from a responsive and well-informed health care system

Knowledge and Information Sharing

Facilitate stronger collaboration and sharing amongst Alliance members and other stakeholders with webinars, town halls, and newsletters to improve and extend services for people living with MBC.

MBC Information Project

Investigate with partners the potential to create an independent, up-to-date collection of evidence-based and trusted MBC information.

Empower Project

Building on the work of Alliance members, investigate how to better address information gaps for patients and caregivers, with a focus on underserved communities, as well as physicians.

Potentially pilot new decision-making tools with small groups of health professionals and patients with the aim of strengthening communication between patients and HCPs.

increase understanding

GOAL 3

Increase understanding of MBC and how it differs from early stage breast cancer among those diagnosed, their families, HCPs, researchers, and health policy experts

Public Awareness

Develop with communications researchers main messages that educate people about MBC and how it differs from early stage breast cancer.

Explore how to best leverage the communication capacity of Alliance members to implement a MBC public awareness campaign.

Epidemiology Pilot Project

Collaborating with other agencies and registries, initiate a pilot study designed to achieve more accurate data about the prevalence and disease course of MBC.

Abbreviations:

HCPs = Health Care Providers

MBC = metastatic breast cancer

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, *Gudiance 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 (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 CTRC-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.



together we are stronger than the disease



People living with metastatic breast cancer and patient advocates at the Metastatic Breast Cancer Network 2013 Annual Conference

Metastatic Breast Cancer Alliance

c/o Avon Foundation for Women 777 Third Avenue New York, NY 10017

mbcalliancesocial@gmail.com www.mbcalliance.org www.facebook.com/mbcalliance www.twitter.com/mbcalliance www.pinterest.com/mbcalliance