Understanding the Universality of Sex and Gender in Cancer Care: The Emergence of Sex and Gender Medicine

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PURPOSE: Gender medicine is a sub-specialty that has gained increased recognition in healthcare internationally. The impetus for understanding gender as a complex biopsychosocial system has been driven primarily by a large number of recent studies. In 2001, the influential IOM Report, Exploring the Biological Contributions to Human Health: Does Sex Matter? established gender medicine as a field and documented the robust implications for health. The purpose of this presentation is to give a brief overview, current data in the field of sex and gender medicine and to outline potential areas for research in psychosocial oncology. METHODS: A comprehensive literature review was conducted of the current state of sex and gender medicine, including same and opposite sex relationships. In addition, cross-sectional data was collected (2009 to 2015) from adult outpatients at the City of Hope, a NCI CCC. Each new patient was asked to complete a validated touch screen biopsychosocial screening instrument either in English, Spanish and more recently Chinese, as the standard of clinical care. RESULTS: Depending on their gender, patients reported (N=8,857) different levels of biopsychosocial distress and requests for assistance. Females (mean = 10.1) requested to talk with a member of the team significantly more than males (mean = 6.1), p < .05. The global data to be presented will give insight into how men and women affected by cancer manifest distress, request assistance and educational materials. CONCLUSIONS: Healthcare professionals have been remiss in appreciating the importance of research, tailoring clinical care, and educating ourselves about the rich diversity inherent in gender and sexual identity. Research Implications: The literature suggests that females may be more willing than males to report distress, thus it is unclear if these findings show true gender differences or simple response bias. Future research studies are suggested to further explore gender differences in distress. Clinical Implications: This information should be used to address immediate concerns and to develop ongoing educational programs that are carefully tailored, integrated and timed with medical care.

Funding: None.

Couples Coping With Cancer Together (CCCT): A Model Program For Women With Cancer And Their Partners Integrated Into Standard Medical Care

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PURPOSE: Research shows that women with cancer report high levels of distress and partners can be as distressed. Women have better psychological adjustment to their illness if partners are emotionally supportive, but this is often where partners struggle. CCCT is a model program of psychosocial care for couples developed from research and integrated into standard medical care. METHODS: Opposite/same-sex couples diagnosed with breast cancer are scheduled into CCCT. Couples complete a tailored SupportScreen which identifies biopsychosocial problems, provides real-time triage, education, and linkage to multi-specialists. Couples participate in a standardized session with clinician-educators to review gender-specific supportive behaviors and develop a plan that can include individual/group counseling. Couples then meet with the surgeon/oncologist. Lastly, couples complete SupportScreen Satisfaction tailored for each professional. RESULTS: January 2014 - September 2015 309 Patients were screened in 37 topics and 278 Partners in 33. Some examples of high distress areas are: Patients Treatment side-effects (59.9%), feeling anxious or fearful (48.8%). Partners Feeling anxious or fearful (27%) worry about future (26.3%). August 2014 - September 2015 166 patients/140 partners completed SupportScreen Satisfaction. Couple Satisfaction: Important to talk about treatment and impact of diagnosis… (Patients 92%, Partners 97%); I recommend program… (Patients 94%, Partners 98%). Additional data and analyses will be presented. CONCLUSIONS: Integrating a psychosocial program for couples into standard medical care is feasible. Couples actively participate in gender based discussions and rate the program highly. Additional research needs to be developed to test long term outcomes. Research Implications: There is a dearth of data concerning same sex couples and a need to further explore the unmet needs of this vulnerable and underserved group. Hypothesis driven research now needs to be developed for this model of care and gender-specific interventions to study performance outcomes. Clinical Implications: Couples often struggle to support each other when a woman is diagnosed with cancer. Time
Funding: The Susan G. Komen Foundation provided funding for this research.

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Therapies for Cognitive Deficits Associated with Breast Cancer Treatment: A Systematic Review of Objective Outcomes

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Purpose: At least 20% of women who undergo breast cancer treatment experience cognitive dysfunction during and after treatment. This systematic review summarizes evidence of treatments for these cognitive deficits.

Methods: A systematic search of the literature using 5 databases (PubMed, Embase, Cochrane, PsycINFO, and CINAHL), with no date or language restrictions, resulted in 12 studies that met inclusion criteria and underwent quality assessment. Articles were included if they provided objective, neuropsychological measurements of cognition, language, or memory in adult women undergoing (or who had undergone) treatment for breast cancer. Data were extracted in accord with Cochrane recommendations including characteristics of participants, interventions, outcomes, and studies. Results: Nine studies included women with early stage breast cancer; three included women with later stages. Half of the articles described interventions for cognition that took place during cancer treatment; half described interventions that took place afterward. Five interventions were medical (including a strength-training program), two were restorative, and five were cognitive. Medicinal treatments were ineffective; restorative and exercise treatments had mixed results; cognitive therapy had success in varying cognitive domains. Conclusions: Thus, cognitive therapy seems most promising. Research Implications: Future research should identify optimal assessment tools, timing of cognitive treatment, and cognitive target(s) for treatment.

Research Implications: This comprehensive summary and quality assessment of previous treatment studies highlights both the need for improved research methodologies and further development of cognitive therapies.

Clinical Implications: Familiarity with existing treatment studies and objective neuropsychological outcomes for the cognitive deficits following chemotherapy for breast cancer is clinically relevant because at least 20% of women who undergo breast cancer treatment experience this impairment and need help. This dysfunction begins during a stressful time, in which the ability to pay close attention to and recall streams of medical information is of paramount importance. It continues while cognitive health is needed to make necessary life adjustments, to adhere to treatment protocols, and to resume activities of daily living.


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Evaluation of the Protective Psychosocial Benefits of Mindfulness-Based Stress Reduction for Breast Cancer (MBSR(BC)) among Breast Cancer Survivors (BCS) in Transition off Treatment

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Purpose: Little evidence exists on the effects of MBSR (BC) on the protective psycho-social-personal resources among early stage BCS. BCS report reduced social support and optimists report adjusting more favorably to life transitions, having more stable coping tendencies when confronted with serious disease. Higher levels of mindfulness have been associated with less worry, and rumination, lower distress and depression. The purpose of this research was to evaluate the efficacy of (MBSR(BC)) compared to usual care (UC) in improving protective psychosocial factors (optimism, social support, and mindfulness) among early stage BCS. Methods: In a R01 trial 322 BCS (Stage 0-III) were randomized to a 6-week (2-hour MBSR(BC) program) (n = 168) or a 6 week wait-listed UC regimen (n = 155). Mindfulness was measured by the Five-Facet Mindfulness Questionnaire, optimism was measured by the Life Orientation Test-Revised, and social support by the Medical Outcomes Social Support Survey. Data on Optimism, Social Support, and Mindfulness were measured at baseline, 6 and 12-weeks and were analyzed using linear mixed models. The analyses focused on whether improvement in optimism, social support, and mindfulness occurred at a faster rate for the MBSR(BC) group compared to UC by time points. Results: The mean age was 56.6 for 322 BCS, with 69.4% White Non-Hispanic, 11.6% Black Non-Hispanic and 10.3% White Hispanic. Most had stage I (33.8%) or...
IL (35.7%) BC and 46.6 % had a lumpectomy, and 53.4% a mastectomy. MBSR(BC) improved in optimism (p = .04) and mindfulness (p = .03) faster than UC. Effect sizes were modest (d = 0.24; 0.27, respectively), and statistically significant improvements of the mindfulness effects were observed for the Observe, Describe, and Awareness subscales of mindfulness (all p values < .05) and not for non-judging/non-reacting. Social Support was not improved by participation in MBSR(BC) relative to UC (p = .58). CONCLUSIONS: This RCT provides evidence for Protective Psychosocial Benefits of MBSR (BC) showing significant improvements optimism and mindfulness among BCS after the MBSR(BC) program. Our results in social support, reflects previous research showing women with breast cancer report reduced social support and the MBSR(BC) intervention did not have a significant impact.

Research Implications: This study advances the empirically established benefits of MBSR(BC) in research. It also provides new significant evidence that further validates that MBSR(BC) has an effect supporting the importance of optimism, and mindfulness as important benefits for these survivors. There is a need to further identify the relationship of optimism to fear of recurrence and its influence on adaptation to stress.

Clinical Implications: An increase in optimism and mindfulness, can have a positive clinical influence for BCS in transition off treatment, since optimists adjust more favorably to life transitions and those who may experience higher optimism report less anxiety and depression and those with increased mindfulness have less anxiety and depression. The clinical benefits of MBSR (BC) on these Protective Psychosocial Benefits, are important characteristics for consideration by health care providers.

Funding: This work was supported by the National Cancer Institute, Grant Number: 1R01CA131080-01A2.

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Oral Targeted Cancer Drugs: Factors That Explain Treatment Interruptions

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PURPOSE: Oral molecular agents constitute 30% of cancer treatments. Many of these agents are prescribed as second or third line treatments. Our purpose is to examine, among 89 patients who initiated one of four targeted oral agents (Sorafenib, Pazopanib, Capecitabine, Enzalutamide), how FDA dosing criteria (substandard vs. standard) are related to patient age, sex, physical function and site of cancer. Secondly, during an 8 week observation how do age, sex, cancer site and level of dosing predict subsequent drug interruptions and stoppages? Given the costs of these medications, implications for how patients and oncologists define value will be addressed. METHODS: Data is from a multi-site randomized 8 week trial testing adherence and symptom management strategies among 89 patients newly prescribed Sorafenib, Pazopanib, Capecitabine, or Enzalutamide. Patients agreeing to participate signed consent forms; had their dosing, number of pills/per dose and times/day recorded; and completed an interview including the PROMIS physical function measure (Internal consistency > .85). Patients were re-assessed at 8 weeks to identify if drugs were continued, or if drugs had been interrupted or stopped. RESULTS: Among 89 patients, mean age was 63, 56 males, 33 females, disease(s) being treated: Pazopanib (renal cell and sarcoma) 10/16 patients received standard dose and 2/3 had compromised doses; Capecitabine (breast, GI, colorectal, pancreatic) 8/48 began with standard dose, 21 had dose compromised with 4/21 on standard dose; Enzalutamide (prostate) had 16/16 with standard doses, 1 compromised dosing; Sorafenib (liver, lung pancreatic) had 3/9 with standard dosing, all were compromised. Older patients and those with lower functioning were more likely to be dose compromised. Colorectal and pancreatic patients on Capecitabine accounted for more interruptions/stoppage. CONCLUSIONS: While exploratory, these data suggest: 1) substandard dosing occurs frequently and is related to age, function, drug, and cancer site; 2) standard dose may be related to reduction/stoppage and explained by a complex interplay of patient, disease, and progression. Together these findings raise issues about cost, value and how to identify patients who are more likely to benefit from oral targeted molecular agents.

Research Implications: Findings raise questions about how to assess the value of oral agents.

Clinical Implications: Findings have implications for nursing practice which include seeking strategies to assist patients to stay on the medications, manage severe symptoms, foster physical function, or transition to palliative care.

Funding: NIH/NCI (1R01CA162401-01A1), Improving Adherence to Oral Cancer Agents and Self Care of Symptoms Using an IVR. Given, B.A. & Given, C.W. (Multiple PIs) 2013-2017.

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Early Decline of Health-Related Quality of Life during Treatment in Head and Neck Cancer Patients Treated with Radiotherapy

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Psycho-Oncology 25 (Suppl. 2): 1–155 (2016)
DOI: 10.1002/pon