

Paper Abstracts of the 2016 APOS 13th Annual Conference

## Symposia and Paper Abstracts

### S1-1

#### 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.

### S1-2

#### 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

with brain tumors may be uniquely affected in terms of physical and psychosocial functioning due to the often life-threatening nature and generally poor prognosis of this disease. The purpose of this study was to examine characteristics of neuro-oncology patients and the relationship between style of coping and depression among individuals referred for psychological evaluation and treatment at a NCI-designated cancer center.

**METHODS:** The study sample consisted of individuals (age =  $55.0 \pm 16.1$  years, 87% White) diagnosed with a primary brain tumor (N=58) being seen for disease management at a NCI-designated cancer center. All individuals were referred for psychological evaluation and treatment. At the initial visit, individuals completed a packet of questionnaires which assessed a variety of psychological and physical symptoms. For these analyses, data was used from the Center for Epidemiologic Studies Short Depression Scale, Brief COPE, and McGill Pain Questionnaire. Although data was collected across disease sites, only those individuals with a primary brain tumor were included in this sample. **RESULTS:** Results showed that 65.5% of individuals were experiencing significant depression at the time of evaluation. Pearson product-moment correlations showed negative coping styles (i.e., self-blame, denial, substance use, behavioral disengagement) were associated with more depressive symptoms,  $r = .61, .47, .31$ , and  $.65$ , respectively (all  $ps < .05$ ). Hierarchical linear regression analyses revealed that after controlling for physical pain, which is often predictive of depression among cancer patients, only behavioral disengagement remained as a significant predictor of depressive symptoms ( $\beta = .35$ ,  $p = .030$ ). This indicates that individuals who were more likely to use this style of coping were more likely to report higher levels of depression. **CONCLUSIONS:** The results of the current study suggest that among individuals diagnosed with primary brain tumors, behavioral disengagement as a coping strategy may predict higher levels of depression. This suggests a pattern of avoidance and hopelessness among individuals diagnosed with a life-threatening disease, which in turn may negatively influence quality of life and willingness to seek help for depression. These findings are consistent with research on coping styles and depression among other disease sites, but have yet to be investigated with this unique population.

**Research Implications:** Future research should further delineate the relationship between coping styles and depression among individuals with low-grade vs. high-grade brain tumors.

**Clinical Implications:** When screening for distress among individuals diagnosed with cancer, it may be important to focus on those types of cancer which have higher mortality rates, such as brain cancer. These

individuals may be less likely to actively seek out psychological treatment. Streamlining the screening process for distress across all providers may help to identify those individuals who may be at highest risk for psychological problems.

**Funding:** None.

**P2-35**

### Examination of Moderators on Effects of Mindfulness Based Stress Reduction (MBSR) Among Breast Cancer Survivors (BCS)

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**PURPOSE:** Investigating treatment moderators of effects of behavioral interventions, is supported by the National Institutes of Health's call for personalized medicine. There is little evidence on what sub groups of patients may benefit from MBSR as an intervention. The purpose of this research was to evaluate the impact of moderators on the effects of MBSR(BC) among early stage breast cancer survivors (BCS). **METHODS:** In a R01 trial 322 BCS (Stage 0-III) were randomized to either a 6-week (2-hour MBSR(BC) program) (n=168) or a wait-listed UC regimen (n=155). Data were collected at baseline, 6 and 12 weeks on demographic, clinical, psychological and physical symptoms, and protective factors. The moderator effects were tested as interaction effects in the context of series of linear mixed models. Cancer conditions (stage and type of treatment) and baseline participant characteristics (Stress, Anxiety, Optimism, Quality of Life, and Social Support) were tested as moderators of the most robust main effect on symptom improvement (Depression, Fear of Recurrence, and Fatigue). **RESULTS:** The mean age was 56.6 years 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 II (35.7%) BC and 46.6 % had a lumpectomy, and 53.4% mastectomy. BCS presenting with the highest distress at baseline experienced most improvement from MBSR(BC) showing statistical significance for the moderator perceived stress. BCS with the highest stress and anxiety at baseline experienced greater improvements from the MBSR(BC). This moderation effect was observed for the outcome of Depression and baseline, Stress ( $p = 0.001$ ), Anxiety ( $p = 0.002$ ),

Optimism ( $p=0.039$ ) and Social Support ( $p=0.01$ ). **CONCLUSIONS:** The moderation analysis suggests that when participants were examined by levels of baseline factors, stress, and anxiety, the effects of MBSR (BC) were most pronounced demonstrating that for those patients who were suffering most at baseline, particularly high levels of stress, gained the most benefit from MBSR(BC). In addition, those that were most optimistic and had more social support, had a more beneficial effects from MBSR(BC).

**Research Implications:** Consistent with a patient-centered approach, these data support the notion of using baseline clinical status to identify patients most likely to benefit from MBSR(BC). This research indicates that MBSR(BC) as a treatment could be personalized if patients were assessed prior for characteristics or symptoms benefited from MBSR(BC).

**Clinical Implications:** This study shows that BCS who are highly stressed and anxious, could benefit from a personalized program that includes an MBSR(BC) intervention. This study also supports the importance of stress screening in psycho-oncology.

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## P2-36

### Investigating the features of clinical fear of cancer recurrence: A qualitative analysis

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**PURPOSE:** Fear of cancer recurrence (FCR) is a prominent area of study in psychosocial oncology. Some researchers agree that FCR ranges in severity from adaptive to clinical, but it remains unclear how they differ. Features of clinical FCR have been suggested, but little empirical evidence exists to support these proposed characteristics. The purpose of this study was to conduct semi-structured interviews with cancer survivors with low and high FCR in order to investigate the core features of clinical FCR. Studying such characteristics will ensure that measures and screening tools for FCR contain pertinent items for accurate identification of clinical FCR. **METHODS:** Participants were selected from a larger study where they completed the Fear of Cancer Recurrence Inventory. Those who scored in the 25<sup>th</sup> and 75<sup>th</sup> percentiles on the Severity subscale were contacted for interview. Inclusion criteria were: a previous diagnosis of breast, prostate, lung, or colorectal cancer; had undergone treatment within the last 13 years; and were fluent in

English. Forty ( $n=19$  female) cancer survivors participated in the Semi-structured Interview on Fear of Cancer Recurrence (SIFCR). Interviews were transcribed verbatim, an open coding frame was developed with themes and sub-themes, and 20% of the interviews were double-coded. **RESULTS:** Based on the qualitative analysis, ten themes were primarily discussed by participants who were rated as having high FCR after the interview. These were: death-related thoughts, the experience of cancer related thoughts and imagery that lasted 30 minutes or more, thoughts that were recurrent and difficult to control, which caused distress, and impaired functioning, they believed that the cancer would inevitably recur, had more cancer-related thoughts over time and described feelings of uncertainty and feeling alone. Participants with both low and high FCR described similar triggers and coping strategies such as body sensations and reassurance seeking. **CONCLUSIONS:** This qualitative analysis suggested ten core features of clinical FCR, based on themes that were predominantly discussed by those rated as having high FCR. This study provides evidence to support some of the proposed characteristics of clinical FCR. However, contrary to some suggestions in the literature, triggers and coping strategies were not part of the core features of clinical FCR, as they were discussed by the majority of participants, irrespective of their FCR severity. These components of FCR in general and characteristics specific to clinical FCR may contribute to the development of measures and screening tools for FCR.

**Research Implications:** Further research is needed to determine if there are any qualitative differences in how triggers are experienced, or how coping strategies are utilized among those with low and high FCR. Further prompting of some questions on the SIFCR such as how much effort is put into coping strategies and the frequency with which they occur, as well a pilot testing new and revised questions are also areas for further research. More research on clinical FCR may clarify its core features and further investigation is needed on the importance of clinicians' opinions for identifying those with high FCR.

**Clinical Implications:** Although some level of FCR may be adaptive, it can cause distress and impairment in functioning for those experiencing it at high levels. Identifying the core features of clinical FCR may aid clinicians in understanding FCR and determining which therapeutic strategies may be beneficial for its treatment. The parallels found between clinical FCR and other psychological disorders may help guide the treatment of severe FCR. Establishing the defining characteristics of clinical FCR can help clinicians recognize improvements when treating a patient's FCR and to ensure that those who need help managing their fears are accurately and consistently identified.

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