Spousal Communication in Metastatic Breast Cancer

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Support Needs of Women with Metastatic Breast Cancer (MBC)

- Women diagnosed with MBC must learn to cope with the physical, emotional, and social consequences of living with a terminal disease and the expectation of a future characterized by additional treatments, progressive physical disability, and death.

- About 1/3 will experience clinically significant levels of depression, anxiety, and/or traumatic stress symptoms.

- 60% report experiencing significant pain.

- These women have a significant need for emotional and practical support.
Who Provides Support?

For women who are married or in a committed relationship, their spouses and intimate partners are often their most important source of support.
Patients can solicit support from their partners by directly asking for it or by disclosing their cancer-related concerns.

However, there is little evidence to suggest that disclosure by itself alleviates distress.

In order for the support process to ‘work’, the partner must be aware that the patient needs support and respond in a supportive manner.
Social Support in the Context of MBC

- Patients with MBC experience more pain, functional disability, and distress than patients with early stage breast cancer.

- Likewise, their partners report greater caregiver strain and psychological distress than the partners of patients with early stage disease.

- Given this, there is increased risk that:
  - patients might not clearly communicate their support needs.
  - their partners’ responses might not be supportive.
Gaps in the Knowledge Base

- We know very little about how support transactions unfold as MBC couples cope with the everyday challenges of pain, functional disability, and distress.

- We do not know:
  - if partner responses affect patients’ emotions as well as their subsequent disclosures
  - if there are non-verbal ways of communicating that patients might use to solicit support
  - if/how partner responses might influence patient non-verbal behaviors
Spousal Relationships and Pain in Metastatic Breast Cancer
Eligibility Criteria

Female patients were eligible if they:

1. were starting treatment for MBC

2. had a physician-rated Eastern Cooperative Oncology Group (ECOG) performance status score ≤ 2 (i.e., ambulatory and capable of all self-care but unable to perform any work activities)

3. rated their average pain as being 1 or higher (0=no pain and 10=worst pain imaginable) on the Brief Pain Inventory

4. were fluent in English

5. had a male partner (spouse or significant other) with whom they lived for at least 1 year
Design

Today I avoided speaking with my wife about her thoughts and feelings about the cancer.

- Not at All
- A Little
- Somewhat
- Very Much
Procedures

- **Parent Study:** 191 patients and their partners separately completed written surveys at baseline (treatment initiation), and again 3 and 6 months later.

- **Optional Study:** 94 consecutive couples who agreed to participate in the parent study were approached to participate in the electronic daily diary study.

  - 59/94 couples agreed to participate (63% response rate)
Recruitment Sequence

Baseline

- **Approach participants at Clinic visit @ treatment initiation (any line).**
- **Optional Procedure? EMA**
  - **YES**
    - Informed Consent & Instruct Participants to use electronic diary
    - Participants complete electronic diary assessments Day 1-14 of chemotherapy
  - **NO**
    - Participants complete the baseline questionnaire within first 2 weeks of treatment initiation

3-Month

- Complete 3 month questionnaire

6-Month

- Complete 6 month questionnaire
- End
Research Question

Do partner responses affect the patient’s emotions as well as subsequent disclosures?
Partners Can Be Unsupportive

- criticism
- hostility
- conveying disinterest
- conveying irritation or frustration
- conveying a lack of interest or empathy
- withdrawal
- avoidance
- ignoring
The Social Cognitive Processing Model posits that social constraints can hinder future patient disclosures and contribute to patient distress.

No one has empirically tested both of these propositions simultaneously in the context of cancer or examined the temporal sequence of these events.
An Electronic Diary Study of the Impact of Patient Avoidance and Partner Social Constraints on Patient Momentary Affect in Metastatic Breast Cancer

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Hypotheses

1. The more partners engaged in social constraints on one day, it would increase the likelihood that patients would avoid talking with their partners about cancer that same day and the following day.

2. The more partners reported engaging in constraints on one day, patients would report higher levels of negative affect the following day.
Patient Momentary Mood

- Assessed 6 times a day for 14 days using 8 mood adjectives from Larson and Diener’s Circumplex Model of affect.

- We created a negative mood factor comprised of 3 adjectives:
  
anxious - sad - angry
Partner Constraints & Patient Avoidance of Disclosure

- **Partner Constraints:**
  
  “Today, I avoided talking with my wife about her thoughts and feelings about cancer.”

- **Patient Avoidance of Disclosure:**
  
  “Today, I avoided talking with my husband about my thoughts and feelings about cancer.”

- Assessed once a day in the evening for 14 days

- Note: Items were rated on a Likert-type scale ranging from 1 (not at all) to 4 (very much)
Results for Hypothesis 1

- Using multilevel path modeling, we failed to find any significant within-person effects of partner constraints on patient avoidance that same day or the following day.
Hypothesis 2

- We used multilevel structural equation model in MPLUS
- We examined the effects of partner constraints the previous evening on patient affect the following morning after controlling for time and the patient’s affect the previous evening
- Note: the patient’s dyadic adjustment and pain were also examined as potential model covariates
Consistent with our hypothesis, the typical patient reported significantly higher levels of negative affect on the mornings after her partner reported engaging in higher levels of constraints ($B=.126$, $p=.017$, 95% CI: 0.023, .229).
Summary of Results

• We did not find an association between partner constraints and patient avoidance

Possible Explanations

1. Accuracy of interpersonal perception – we only measured partner reports of their own constraints, not the patient’s perceptions of her partner’s constraints

2. We only measured one type of partner constraints and one type of patient communication. Future studies should identify and examine the full range of constraints on different aspects of patient communication to determine their true effects

• We did identify a temporal link between partner constraints and patient momentary affect such that the experience of social constraints one day carried over and affected patient negative affect the following day
• Are there any non-verbal forms of communication that patients might use to solicit support?

• Do partner responses influence these behaviors?
According to the chronic pain literature:

- Patients engage in pain behaviors (e.g., moaning, distorted ambulation) when they do not know how to verbalize their support needs.

- Those who are more depressed are more likely to display pain behaviors.

- Pain behaviors are affected by social contingencies:
  - Partners can reinforce pain behaviors by engaging in supportive/solicitous responses (e.g., providing attention/sympathy).
  - They can also minimize or extinguish pain behaviors by engaging in negative/unsupportive responses (e.g., ignoring, showing irritation).
Pain Behaviors in MBC

- Few studies have examined the role of pain behaviors in cancer

- However, we know that patients often have difficulty discussing cancer symptoms and concerns

- Pain behaviors could serve a communicative function - allowing patients to solicit support from their partners without directly requesting it

- Under these circumstances partner negative/unsupportive responses could possibly increase the likelihood that the patient engages *in more pain behaviors* (i.e., to solicit more attention or support)
Associations between Depression, Pain Behaviors, and Partner Responses to Pain in Metastatic Breast Cancer

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Paper-and-pencil Baseline Measures

- **Multidimensional Pain Inventory (MPI)**
  - Pain Severity
  - Partner Negative Responses - 4 items (e.g., ignores, gets irritated, frustrated, and angry)

- **Depression – CES-D**

- **Pain Behaviors – Pain Behaviors Checklist (PBCL)**
  - e.g., distorted ambulation, facial/audible expressions of pain
Results

- Patients were more likely to engage in pain behaviors when they experienced more depressive symptoms.
- Partner depressive symptoms mediated associations between patient pain and partner negative/unsupportive responses.
- The magnitude of the mediated effect was 75%.
Results

Note: MPI = Multidimensional Pain Inventory; PBCL = Pain Behaviors Checklist
Summary

• Patients are more likely to engage in pain behaviors when they are more depressed.

• Partners are more likely to engage in unsupportive/negative responses when patients are in more pain and they (partners) are more depressed.

• Findings support the idea that MBC patients who engage in pain behaviors when they are experiencing low levels of pain may be trying to solicit support.
Conclusions, Implications, & Future Directions
Conclusions

• In spite of the emotional, functional, and practical challenges of living with a terminal disease, women with MBC are reactive to the effects of communication problems with their partners such that partner constraints experienced on one day carry over and continue to affect their mood negatively the following day.

• The severity of pain experienced by the patient may be important to consider when examining associations between partner responses and patient pain behaviors in the context of MBC.
Clinical Implications

- Overall, our findings have interesting implications for pain management interventions in MBC and suggest a need for couple-based programs.

- Such programs should:
  - target daily support transactions between patients and their partners.
  - teach patients how to effectively solicit support.
  - teach partners ways to provide support without inadvertently encouraging pain behaviors or increasing patient distress.
Clinical Implications (continued)

- Such programs may hold particular promise for couples where one or both partners are depressed.

- Women with depressed mood are more likely to engage in negative support solicitation behaviors and these behaviors can perpetuate depression.

- Our findings showed that depressed partners were more likely to respond negatively to the patient’s pain.
Future Research Directions

With an eye toward developing such interventions, future research should:

1. clarify the mechanisms by which social constraints hinder patient adjustment

2. determine whether teaching MBC couples to communicate effectively about pain and solicit/provide support helps to reduce both partners’ depression and maladaptive responses to pain
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