









PAPER

Predictors of long-term distress in female partners of men diagnosed with prostate cancer

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Funding information

National Health and Medical Research Council, Grant/Award Number: ID496001; Cancer Council Queensland (ProCan)

Abstract

Objective: Female partners of men with prostate cancer (PCa) experience heightened psychological distress; however, long-term distress for this group is not well described. We examined partner's psychological and cancer-specific distress over 2 years and predictors of change.

Methods: A cohort of 427 female partners (63% response; mean age 62.6 y) of PCa survivors completed baseline (2–4 y post-PCa treatment) assessments of anxiety, depression, and cancer-specific distress and were followed up at 6, 12, 18, and 24 months. Caregiver burden, threat and challenge appraisal, self-efficacy, and dyadic adjustment were assessed as potential predictors of distress.

Results: Over time, 23% to 25% of women reported anxiety; 8% to 11% depression; 5% to 6% high cancer-specific distress. Higher caregiver burden and more threat appraisals were associated with increased distress, anxiety, depression, and cancer-specific distress over time. Higher dyadic adjustment over time and more challenge appraisals at 24 months were associated with less distress, anxiety, and depression. Increased partner self-efficacy was associated with lower distress and depression at baseline.

Conclusions: A substantial subgroup of partners experience ongoing anxiety, with depression less prevalent but also persistent. Caregiver burden, partner self-efficacy, threat, and challenge appraisals present as potential supportive care targets.

KEYWORDS

anxiety, cancer, caregivers, carers, depression, longitudinal, oncology, partners, prostate cancer, psychological distress

1 | INTRODUCTION

Prostate cancer (PCa) is the most common male cancer in the developed world with an estimated 760 000 men diagnosed in 2012¹; 95% of men live for at least 15 years.² Although men are living longer, the side effects of PCa diagnosis and treatment, such as sexual dysfunction and diminished quality of life (QoL), can be considerable and persistent.³ For every man diagnosed with PCa, at least the same number of family or caregivers exist. Partners provide emotional and practical support during diagnosis, treatment, and subsequent side effects, while coping with their own emotional distress. Overall, 49% of partners report moderate to severe anxiety and 10% moderate to

severe depression.⁴ For partners of men with localised PCa, 36% have mild to severe anxiety; 9% mild to severe depression⁵; and 20% cancer-specific distress.⁶ Thus, a substantive proportion of partners experience heightened psychological distress.^{4,6}

Increased partner distress can be linked to individual factors such as coping style, social isolation, and the partner's own health; the man's sexual dysfunction, urinary incontinence, or QoL; and relationship variables such as relationship satisfaction or caregiver burden.^{3,7} Men's distress may also play a role in their partner's distress and vice-versa.^{5,8} The partner's own health and psychological distress also influences on their QoL,⁹ and partner distress may also vary according to the man's disease stage, treatment type, or phase in the cancer trajectory.

To date, research on partners of men with PCa is limited by cross-sectional designs, small sample sizes, and lack of long-term follow-up.¹⁰⁻¹³ Of the few longitudinal studies in this context that exceed 1-year follow-up, most considered general or disease-specific QoL,^{9,14} and where psychological outcomes were assessed, few applied validated measures of distress. Sterba et al¹⁵ found that partners' of men treated with radical prostatectomy and receiving postadjuvant treatment or observation had improved mental health over the 24-month study period.¹⁵ However, this study was limited by including only 31 partners, and so an understanding of long-term partners' psychological distress is a knowledge gap. In addition, there remains a lack of clarity about prospective and potentially modifiable predictors of distress. Accordingly, the current study described partner's psychological distress (anxiety, depression) and cancer-specific distress over a 2-year period and examined predictors of change over time.

2 | METHOD

2.1 | Participants

Participants were female partners of a pre-existing cohort of men with PCa (93% localised disease).¹⁶ Inclusion criteria: aged 18 years or older; in a relationship with the man prior to PCa treatment; able to read and speak English. Study information packages and consent form were mailed to 677 partners from January 2009 to November 2010. Of the partners contacted, 462 consented to participate and 427 completed baseline surveys (63% response rate). Ethical approval to identify and contact the men's partners was granted from the Griffith University Human Research Ethics (PSY/H3/07/HREC).

2.2 | Procedure and measures

Background characteristics were assessed via telephone interview at baseline. Psychological distress was measured at baseline (2-4 y after men's PCa treatment) and 6, 12, 18, and 24 months later through a mailed self-report survey; predictor variables were assessed at each time point.

2.2.1 | Psychological outcomes

Psychological distress

Distress was measured using the total scale (14 items) and 2 subscales of the Hospital Anxiety and Depression Scale.¹⁷ Higher scores indicate more anxiety or depression (range 0-21 for subscales; 0-42 for total). Across the study period, internal consistency for the total scale ($\alpha = 0.90-0.93$) and anxiety ($\alpha = 0.87-0.91$) and depression subscales ($\alpha = 0.82-0.86$) was good. Cut-off scores ≥ 8 (subscales¹⁷) and ≥ 11 (total) indicate probable cases of distress.

Cancer-specific distress

The Impact of Event Scale-Revised¹⁸ measured the degree to which partners experienced intrusive or avoidant thoughts or behaviours or hyperarousal in the past 7 days in relation to the man's PCa. Scores are summed across the 22 items with higher scores indicating

increased cancer-specific distress (range 0-88). Scale internal consistency was excellent ($\alpha = 0.95-0.96$). A cut-off score ≥ 33 indicates cases of high distress.

2.2.2 | Predictors of change in psychological distress

Caregiver burden

The Caregiver Burden scale¹⁹ measured how often during the past month partners felt burdened (eg, stress or strain experienced) by the man's PCa. Average scores are constructed across all 22 items. Higher scores indicate a greater degree of burden (range 1-4). Internal consistency was excellent ($\alpha = 0.93$).

Stress appraisal

Two subscales from a dispositional stress appraisal measure²⁰ assessed partner challenge and threat appraisals regarding the man's PCa. Example items include "I feel I can become a stronger person because of this situation" (challenge appraisal) and "This situation makes me feel totally helpless" (threat appraisal). Average scores are constructed for each subscale. Higher scores indicate more engagement in challenge or threat appraisals (range 1-5). Internal consistency for each subscale was good (Challenge $\alpha = 0.84$; Threat $\alpha = 0.83$).

Partner self-efficacy

A partner version of the Self-Efficacy for Symptom Control Inventory (15 items²¹) measured the degree to which partners felt able to help patients with the following aspects of living with PCa: daily tasks, symptom management, and coping. An average score is constructed for each of the 3 subscales and then summed (range 30-300). Higher scores indicate increased self-efficacy ($\alpha = 0.96$).

Dyadic adjustment

The 7-item Dyadic Adjustment Scale²² measured how satisfied partners felt with their relationship. Scores are summed with higher scores indicating more satisfaction with the relationship (range 0-36; $\alpha = 0.83$).

2.3 | Statistical analyses

Descriptive analyses including means, standard deviations, and frequencies were conducted initially. The number of partners who were distressed at each assessment is reported as the percentage who scored equal to or above the cited cut-off scores for each measure. Linear growth models in Mplus Version 7.4²³ examined the trajectory of individuals on psychological outcomes over 24 months. Unconditional growth models that examined average trajectories of psychological outcomes in the sample are reported first, followed by conditional growth models with time-invariant demographic factors and time-varying psychological predictors.²⁴ Demographic factors age, time lived together with partner/married, education, and time since patient treatment were measured at baseline. Time-varying psychological predictors were assumed to be fixed effects, with coefficients varying over time. Individual variation in growth parameters (intercept and slope) was captured by random effects with different variance components. The residual variances of psychological

outcomes were assumed to be the same across time. Missing data in psychological outcomes were handled in Mplus using a robust full information maximum likelihood estimation procedure with the assumption that the missing scores are unrelated to the psychological outcomes (missing at random).

Estimated trajectories of psychological outcomes over 24 months were examined at lower, average, and higher levels of the psychological predictors over time to illustrate the association between the psychological predictors and outcomes. For all predictors except caregiver burden, each level at each time point was set at scores of one standard deviation below the mean, the mean, and one standard deviation above the mean. Caregiver burden was positively skewed, and one standard deviation below the mean fell outside the range of the measure (range 1-4). Therefore, each level was instead set at scores at the 25th, 50th, and 75th percentile at each time point.

3 | RESULTS

3.1 | Sample characteristics

At baseline, 460 partners completed the telephone background interview and 427 returned the self-administered questionnaire. Mean age of partners was 62.8 years (SD = 8.03; range 29.5-83.0). Most were living with/married to patients (96%), and this was for a mean of 36.3 years (SD = 12.8; range 2.1-59.5). Most did not have children living at home (77%); 44% had completed a university degree or technical certificate; and 60% had a gross household income of less than AUD\$60 000 per year. Most of the participants' partners had localised PCa; 4 (1%) had locally advanced PCa and 27 (6%) had advanced PCa. Follow-up completions are reported in Table 1.

3.2 | Prevalence and predicted trajectories of psychological distress

Up to 28% of partners were distressed over the 2-year assessment time frame (Table 1) with anxiety (23%-25%) more prevalent than depression (8%-11%). Separate analyses predicting change in overall psychological distress, anxiety, and depression are reported below.

3.2.1 | Psychological distress

The unconditional growth model suggested that psychological distress, on average, did not change over time, slope = -0.014 ($P = .221$). Inclusion of baseline demographic factors and time-varying psychosocial predictors showed significant associations between these factors and psychological distress over time (Table 2). Predicted trajectories of distress across 24 months were plotted at lower, average, and higher levels of the significant psychological predictors (Figure 1). Psychological distress was significantly lower for older partners (difference in scores = -0.105 per year increase in age, 95% CI, -0.18 to -0.03 , $P < .01$).

Partners with higher caregiver burden reported significantly increased psychological distress across all measured time points (differences in scores range from 5.146 to 7.441, all $P < .001$) compared with partners with lower burden (Table 2, Figure 1A). Partners who made more negative threat appraisals also had significantly increased psychological distress across all measured time points (differences in scores range from 0.944 to 1.185, all $P < .001$; Table 2, Figure 1B). Partners who made more positive challenge appraisals had lower psychological distress, particularly at 24 months follow-up (difference in scores = -0.754 , 95% CI, -1.26 to -0.24 , $P < .01$; Table 2, Figure 1C). Higher partner self-efficacy for control of PCa-related symptoms was associated with significantly lower psychological distress at baseline only (difference in scores = -0.011 , 95% CI, -0.02 to -0.003 , $P < 0.01$; Table 2, Figure 1D). Increased dyadic

TABLE 1 Descriptive statistics and prevalence of psychological and cancer-specific distress over 2 years

Variable	Baseline (n = 427)	6 months (n = 396)	12 months (n = 362)	18 months (n = 351)	24 months (n = 359)
Psychological distress					
Anxiety (range measure 0-21)					
M (SD)	4.97 (4.01)	4.88 (4.07)	4.70 (4.15)	4.56 (4.18)	4.34 (4.18)
% case (score ≥ 8)	24%	25%	25%	23%	23%
Depression (range measure 0-21)					
M (SD)	2.54 (3.00)	2.80 (3.20)	2.68 (3.27)	2.70 (3.26)	2.52 (3.17)
% case (score ≥ 8)	9%	11%	10%	8%	8%
Total (range measure 0-42)					
M (SD)	7.53 (6.48)	7.68 (6.73)	7.38 (6.94)	7.25 (6.99)	6.85 (6.90)
% case (score ≥ 11)	26%	28%	28%	27%	23%
Cancer-specific distress (range measure 0-88)					
M (SD)	8.88 (12.39)	7.78 (12.51)	7.83 (12.16)	6.88 (11.50)	6.94 (11.76)
% case (score ≥ 33)	6%	5%	6%	6%	5%

M (SD) for baseline predictors: caregiver burden = 1.37 (0.44); threat appraisal = 2.56 (0.97), challenge appraisal = 3.26 (0.83); partner self-efficacy = 232.27 (55.91); dyadic adjustment = 24.59 (5.57).

TABLE 2 Random-effects mixed regression analyses for psychological and cancer-specific distress over 2 years (N = 259)

Variable	Psychological Distress b (95% CI)	Anxiety b (95% CI)	Depression b (95% CI)	Cancer-Specific Distress b (95% CI)
Demographics				
Age	-0.105** (-0.18 to -0.03)	-0.088*** (-0.14 to -0.04)	-0.017 (-0.05 to 0.02)	-0.078 (-0.21 to 0.06)
Time with partner	0.027 (-0.02 to 0.08)	0.020 (-0.01 to 0.05)	0.007 (-0.01 to 0.03)	0.013 (-0.08 to 0.10)
Higher education ^a	0.270 (-0.72 to 1.26)	0.132 (-0.51 to 0.78)	0.122 (-0.32 to 0.57)	-0.612 (-2.39 to 1.17)
Time since patient treatment				
3 years versus 2 years	-0.197 (-1.34 to 0.95)	-0.159 (-0.90 to 0.58)	-0.045 (-0.56 to 0.47)	0.169 (-1.88 to 2.22)
4 years versus 2 years	-0.136 (-1.54 to 1.27)	0.129 (-0.78 to 1.04)	-0.275 (-0.90 to 0.35)	0.554 (-1.97 to 3.08)
Psychological predictors^b				
Baseline				
Caregiver burden	5.146*** (3.89 to 6.41)	3.146*** (2.32 to 3.97)	2.155*** (1.52 to 2.79)	10.67*** (8.20 to 13.1)
Threat appraisal	1.139*** (0.69 to 1.59)	0.750*** (0.46 to 1.04)	0.414*** (0.18 to 0.65)	2.931*** (2.04 to 3.82)
Challenge appraisal	-0.041 (-0.54 to 0.46)	-0.081 (-0.41 to 0.25)	0.031 (-0.23 to 0.29)	0.108 (-0.89 to 1.11)
Partner self-efficacy	-0.011** (-0.02 to -0.003)	-0.004 (-0.01 to 0.002)	-0.007** (-0.01 to -0.003)	-0.006 (-0.02 to 0.01)
Dyadic adjustment	-0.111* (-0.20 to -0.02)	-0.056 (-0.11 to 0.003)	-0.048* (-0.09 to -0.003)	0.032 (-0.15 to 0.21)
6 months				
Caregiver burden	6.747*** (5.75 to 7.74)	3.760*** (3.11 to 4.41)	3.144*** (2.65 to 3.64)	14.35*** (12.4 to 16.3)
Dyadic adjustment	-0.177*** (-0.25 to -0.10)	-0.075** (-0.12 to -0.03)	-0.096*** (-0.13 to -0.06)	0.037 (-0.11 to 0.18)
12 months				
Caregiver burden	6.428*** (5.33 to 7.52)	3.559*** (2.84 to 4.28)	3.007*** (2.45 to 3.56)	12.62*** (10.5 to 14.7)
Threat appraisal	0.944*** (0.43 to 1.46)	0.525** (0.18 to 0.87)	0.444*** (0.18 to 0.71)	2.566*** (1.54 to 3.59)
Challenge appraisal	-0.425 (-0.95 to 0.10)	-0.257 (-0.60 to 0.09)	-0.175 (-0.44 to 0.09)	-0.646 (-1.68 to 0.38)
Partner self-efficacy	-0.007 (-0.01 to 0.001)	-0.005 (-0.01 to 0.001)	-0.003 (-0.01 to 0.001)	0.011 (-0.01 to 0.03)
Dyadic adjustment	-0.113* (-0.21 to -0.02)	-0.040 (-0.10 to 0.02)	-0.067** (-0.11 to -0.02)	-0.119 (-0.30 to 0.06)
18 months				
Caregiver burden	7.441*** (6.44 to 8.44)	4.016*** (3.37 to 4.67)	3.576*** (3.07 to 4.08)	14.66*** (12.7 to 16.6)
Dyadic adjustment	-0.196*** (-0.27 to -0.12)	-0.110*** (-0.16 to -0.06)	-0.083*** (-0.12 to -0.05)	-0.014 (-0.16 to 0.13)
24 months				
Caregiver burden	6.286*** (5.11 to 7.46)	3.138*** (2.38 to 3.90)	3.289*** (2.68 to 3.90)	13.20*** (10.9 to 15.5)
Threat appraisal	1.185*** (0.63 to 1.74)	0.696*** (0.34 to 1.05)	0.497*** (0.20 to 0.79)	2.212*** (1.09 to 3.34)
Challenge appraisal	-0.754** (-1.26 to -0.24)	-0.430* (-0.76 to -0.10)	-0.330* (-0.60 to -0.06)	-0.643 (-1.68 to 0.39)
Partner self-efficacy	-0.007 (-0.01 to 0.001)	-0.006 (-0.01 to 0.00)	-0.002 (-0.01 to 0.002)	-0.004 (-0.02 to 0.01)
Dyadic adjustment	-0.073 (-0.17 to 0.02)	-0.028 (-0.09 to 0.03)	-0.039 (-0.09 to 0.01)	0.008 (-0.18 to 0.20)

Data are regression coefficients with 95% CI.

^aHigher education (University or technical college versus school only).

^bPsychological predictors are time-varying covariates (effects at corresponding time points: baseline, 6, 12, 18, and 24 months).

* $P < .05$.

** $P < .01$.

*** $P < .001$.

adjustment was associated with reduced psychological distress up to 18 months follow-up (differences in scores range from -0.111 to -0.196, $P < .01$; Table 2, Figure 1E).

3.2.2 | Anxiety

The unconditional growth model suggested that partners' anxiety on average decreased over time, slope = -0.023 ($P = .001$). Anxiety was significantly lower for older partners (difference in scores = -0.088 per year increase in age, 95% CI, -0.14 to -0.04, $P < .001$; Table 2).

Partners with more caregiver burden reported significantly increased anxiety across all measured time points (differences in scores

range from 3.138 to 4.016, all $P < .001$) compared with those with lower burden (Table 2, Figure 2A). Partners who made more negative threat appraisals also had significantly increased anxiety across all measured time points (differences in scores range from 0.525 to 0.750, $P < .01$; Table 2, Figure 2B). Partners who made more positive challenge appraisals had significantly lower anxiety only at 24 months follow-up (difference in scores = -0.430, 95% CI, -0.76 to -0.10, $P < .05$; Table 2, Figure 2C). Partner self-efficacy was not significantly associated with anxiety at any time point (Table 2). Increased dyadic adjustment was associated with significantly reduced anxiety at 6 and 18 months (differences in scores are -0.075 and -0.110, respectively, $P < .01$; Table 2, Figure 2D).

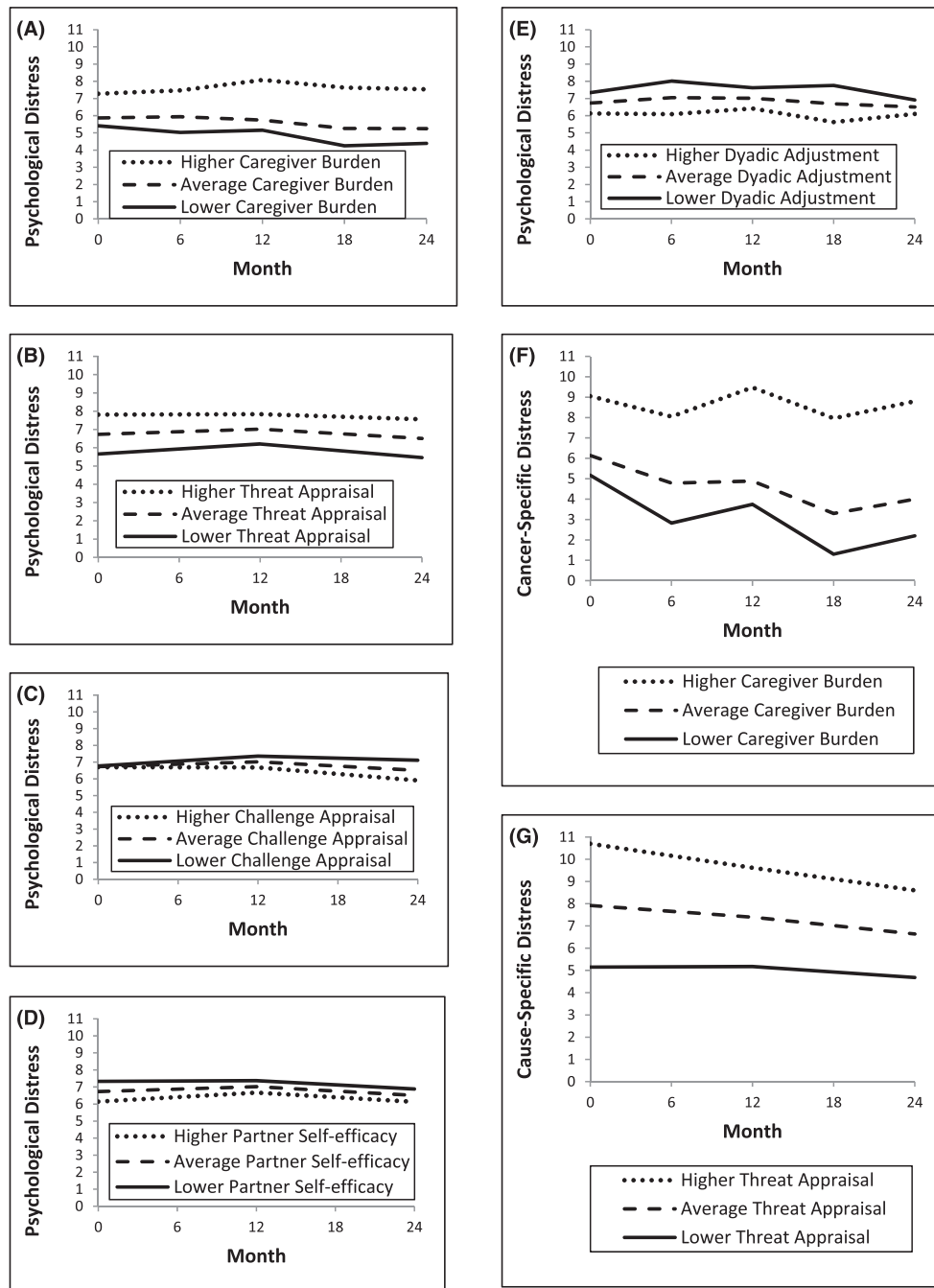


FIGURE 1 Predicted trajectories of psychological distress and cancer-specific distress over 2 years by levels of significant psychological predictors

3.2.3 | Depression

The unconditional growth model suggested that partners' depression, on average, did not change over time, slope = -0.008 ($P = .154$). Partners with higher caregiver burden reported significantly increased depression across all measured time points (differences in scores range from 2.155 to 3.576, all $P < .001$) compared with partners with less burden (Table 2, Figure 2E). Partners who made more negative threat appraisals also had significantly increased depression across all measured time points (differences in scores range from 0.414 to 0.497, all $P < .001$; Table 2, Figure 2F). Partners who made more positive challenge appraisals had significantly lower depression only at 24 months follow-up (difference in scores = -0.330 , 95% CI, -0.60

to -0.06 , $P < .05$; Table 2, Figure 2G). Increased partner self-efficacy was associated with less depression only at baseline (difference in scores = -0.007 , 95% CI, -0.01 to -0.003 , $P < .01$; Table 2, Figure 2 H). More dyadic adjustment was associated with reduced depression up to 18 months follow-up (differences in scores range from -0.048 to -0.096 , $P < .05$; Table 2, Figure 2I).

3.3 | Prevalence and predicted trajectories of cancer-specific distress

Using established cut-offs for cancer-specific distress, approximately 6% of partners were consistently distressed about PCa over the entire

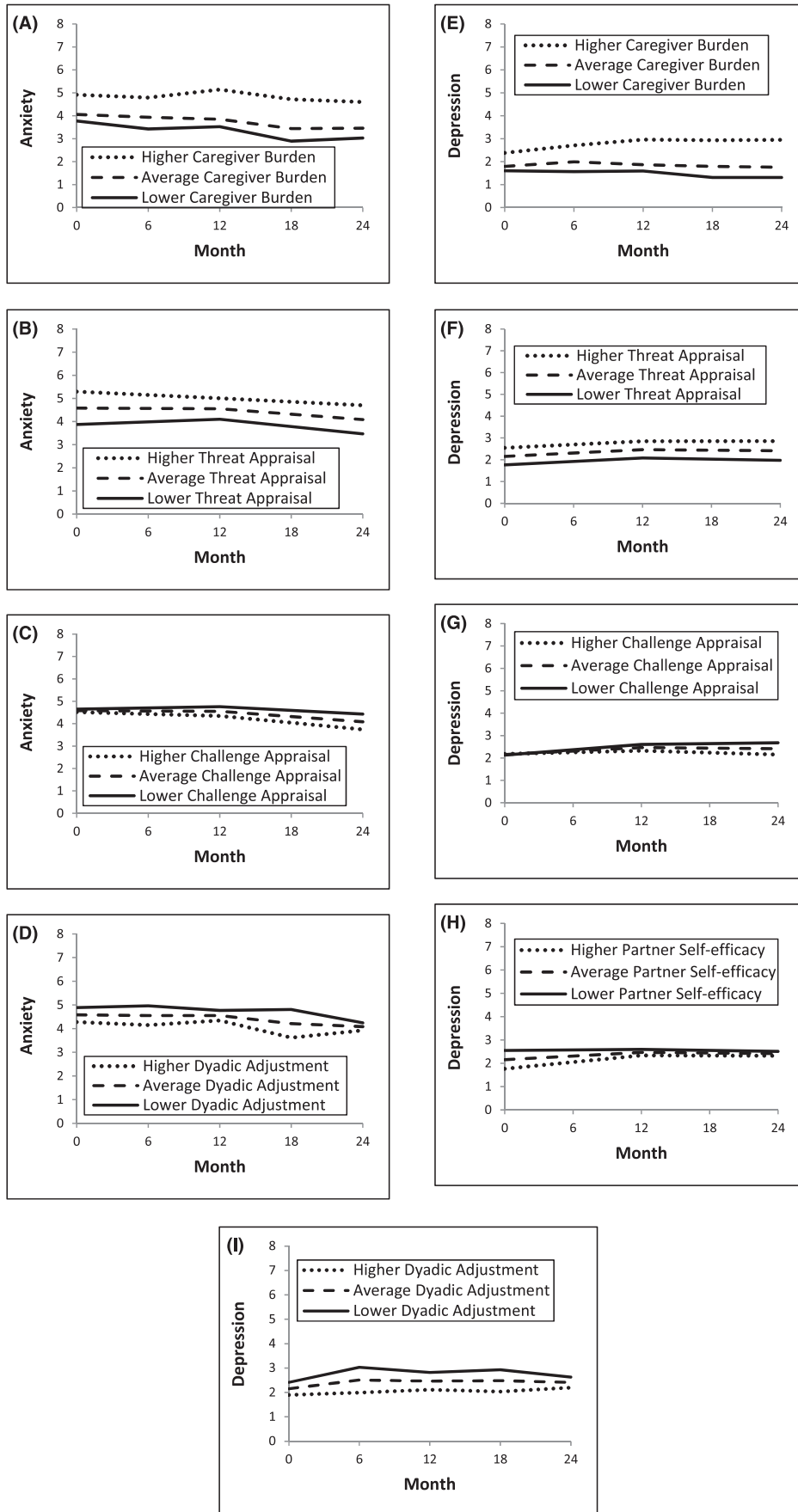


FIGURE 2 Predicted trajectories of anxiety and depression over 2 years by levels of significant psychological predictors

24 months (Table 1). The unconditional growth model suggested that cancer-specific distress, on average, decreased with time, slope = -0.062 ($P = .011$). Partners with higher caregiver burden had significantly increased cancer-specific distress across all measured time points (differences in scores range from 10.67 to 14.66, all $P < .001$) compared with partners with lower burden (Table 2, Figure 1F). Partners who made more negative threat appraisals also reported significantly increased cancer-specific distress across all measured time points (differences in scores range from 2.212 to 2.931, all $P < .001$; Table 2, Figure 1G).

4 | DISCUSSION

This study describes for the first time the persistence of psychological distress well beyond the initial PCa diagnosis and treatment phase. Specifically, although average trajectories showed small improvements in anxiety and cancer-specific distress, overall psychological distress and depression did not reduce over the 2-year study duration. Levels of depression appeared similar to national community data (10% in the current study vs 8.9% current mood disorder,²⁵ 9.3% affective disorder,²⁶ or 5.9% affective disorder for women aged 55–64 γ^{27}) and therefore may reflect the population. However, levels of anxiety were higher than in the community (25% in the current study vs 8% current anxiety disorder,²⁵ 11.2% anxiety-related condition,²⁶ or 13.8% anxiety for women aged 55–64 γ^{27}). This suggests that women may be more likely to experience anxiety in response to their partner's PCa over time.

Partners most at risk of ongoing psychological or cancer-specific distress had higher caregiver burden, perceived PCa as more threatening, engaged in fewer challenge-focused appraisals, and had lower dyadic adjustment. Self-efficacy to manage PCa-related symptoms was linked to lower distress and depression only at baseline. Hence, a number of potentially modifiable variables were identified for consideration in psychosocial interventions for these women.

To mitigate caregiver burden, prior cross-sectional research suggests the importance of increasing information about how to care for men living with PCa at home,²⁸ as well as providing practical and emotional support, building partner/caregiver resources, particularly a supportive social network,²⁹ and strengthening psychological resilience.²⁹ Interventions should also consider both patient (eg, PCa or treatment-related symptoms) and partner (eg, physical and psychological health) characteristics and the potential for these to shift over time. For instance, the initial focus on patient treatment may change to a focus on ongoing side effects²⁸ or the partner needing support for their own health, relationships, or the long-term impact of cancer on their lives.³⁰

Active coping or problem-solving approaches are associated with reduced burden and distress.^{6,31} Cognitive-behavioural interventions that help partners to reframe their thinking about PCa, side effects, and their ability to manage stress may be beneficial.¹³ Partner's self-efficacy may also be a key target at least earlier on in the illness experience given the link between reduced self-efficacy and increased negative appraisals, and the expectation that distress would be highest closer to the time of diagnosis.¹¹

In addition to interventions that address caregiver burden and promote positive cognitive appraisals, Ugalde et al³² note that partners of cancer patients need their own support system to sustain them in a supportive or caregiving role. Thus, beyond support from friends or family, peer support may also be useful for building partners' social resources and awareness of available practical assistance, as well as providing a forum for them to discuss their concerns with like-minded others.^{31,33} Talking to other partners of men with PCa may also assist with cognitive reframing and help women to better process the cancer experience.³⁴

An unexpected finding was that self-efficacy was only related to distress at baseline. While the reasons for this are unclear, it may be that efficacy to cope with a partner's PCa is most critical early in recovery when a patient's symptoms are more pronounced and future outcomes are still uncertain.³⁵ As symptoms stabilise and the couple accommodates to their new patterns of relating, efficacy to help the patient cope may be less psychologically beneficial to the partner because there is less uncertainty about the symptoms. For example, genitourinary symptoms can improve up to 2 years after treatment.³⁶ Once these symptoms stabilise—for better or worse, as the case may be—there may be less uncertainty about the future and how the symptoms will affect the relationship, so the partner's efficacy to help the partner cope with them may be less psychologically beneficial. For these women engaging in self-care may be more critical over the long term.^{37,38}

4.1 | Limitations

Limitations of the current study include the use of a convenience sample of female-only partners, and this neglects the experience of male partners of men with PCa. Gay and bisexual partners may have different needs that are unrecognised or addressed by health care professionals³⁹ which can further limit their accessibility to support. Second, participants were partnered with men who for the most part had localised disease, and so these results likely do not represent the experience of women supporting men with advanced PCa.⁸ Third, patient variables such as the man's distress and health-related QoL may impact partner distress over time.^{5,12,14} Finally, we did not capture early distress in our participant group and so were not able to explore early transitions in adjustment. We recommend that future studies consider these as key research questions.

4.2 | Clinical implications

The finding that many partners of men diagnosed with PCa experience ongoing distress over time suggests the need for regular screening in primary care and community settings to identify partners who may be at risk.³³ This regular screening for partners should be part of PCa survivorship care.⁴⁰ There are well-established psychosocial care standards for screening for patient distress; however, ultrashort screening measures available for use with patients such as the Distress Thermometer have not yet been rigorously validated with partners and this should occur prior to widespread use. In particular, anxiety presents as a particular target given its high prevalence relative to

community cohorts. Thus, distress screening should incorporate measures that have high sensitivity and specificity to detect anxiety.

4.3 | Conclusion

Psychological distress in female partners of men with PCa persists over time. Partners who report improvements in distress have lower caregiver burden, use more positive challenge and less negative threat appraisals, and have higher dyadic adjustment. Resolving emotional and/or practical issues regarding caregiver burden and interventions to promote challenge appraisals present as key targets for intervention.

ACKNOWLEDGEMENTS

We gratefully acknowledge Associate Professor Shu-Kay (Angus) Ng for assistance with statistical analysis. Studies were supported by Cancer Council Queensland (ProsCan) and National Health and Medical Research Council (ID496001) funding.

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How to cite this article: Hyde MK, Legg M, Occhipinti S, et al. Predictors of long-term distress in female partners of men diagnosed with prostate cancer. *Psycho-Oncology*. 2018;27: 946-954. <https://doi.org/10.1002/pon.4617>