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香港大學賽馬會癌症綜合關護中心

Implementation of routine physical and psychological symptom distress screening in cancer care

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Prevalence of psychological distress in patients with cancer

- Active phase of illness trajectory
 - Major depression (16%)
 - Anxiety (10%)
- Survivorship (at least 2 years post-diagnosis)
 - Major depression (11.6%)
 - Healthy controls (10.2%)
 - Anxiety (17.9%)
 - Healthy controls (13.9%)
- Palliative settings
 - Major depression (14.3%)
 - Anxiety (9.6%)

Mitchell, Chan, Bhatti, et al., 2011

Mitchell, Ferguson, Gill, et al., 2013

Mitchell, Chan, Bhatti, et al., 2011



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Psychological and Physical Adjustment to Breast Cancer Over 4 Years: Identifying Distinct Trajectories of Change

Vicki S. Helgeson, Pamela Snyder, and Howard Seltman
Carnegie Mellon University

Published in final edited form as:

Health Psychol. 2011 November ; 30(6): 683–692. doi:10.1037/a0024366.

IDENTIFICATION OF DISTINCT DEPRESSIVE SYMPTOM TRAJECTORIES IN WOMEN FOLLOWING SURGERY FOR BREAST CANCER

Laura B. Dunn, MD¹, Bruce A. Cooper, PhD², John Neuhaus, PhD¹, Claudia West, RN, MS²,
Steven Paul, PhD², Bradley Aouizerat, MAS, PhD^{2,3}, Gary Abrams, MD¹, Janet Edrington,
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Psycho-Oncology

Psycho-Oncology 19: 1044–1051 (2010)

Published online 11 December 2009 in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/pon.1658

Trajectories of psychological distress among Chinese women diagnosed with breast cancer

Wendy W. T. Lam^{1*}, George A. Bonanno², Anthony D. Mancini², Samuel Ho^{1,3}, Miranda Chan⁴, Wai Ka Hung⁴,
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Psycho-Oncology

Psycho-Oncology (2013)

Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/pon.3361

The evolution of psychological distress trajectories in women diagnosed with advanced breast cancer: a longitudinal study

W. W. T. Lam^{1*}, I. Soong², T. K. Yau², K. Y. Wong³, J. Tsang⁴, W. Yeo⁵, J. Suen⁵, W. M. Ho⁵, W. K. Sze⁶, A. W. Y. Ng⁶,
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0278-6133/10/\$12.00 DOI: 10.1037/a0019111

Health Psychology
2010, Vol. 29, No. 2, 160–168

Identification and Prediction of Distress Trajectories in the First Year After a Breast Cancer Diagnosis

Inge Henselmans
University Medical Center Groningen

Vicki S. Helgeson
Carnegie Mellon University

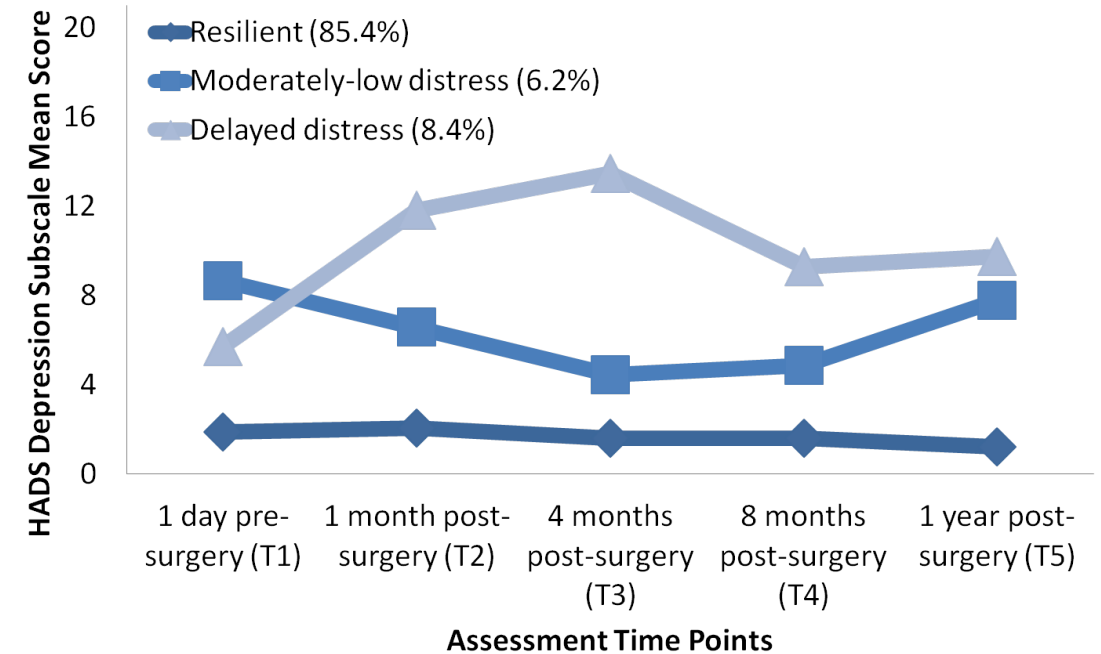
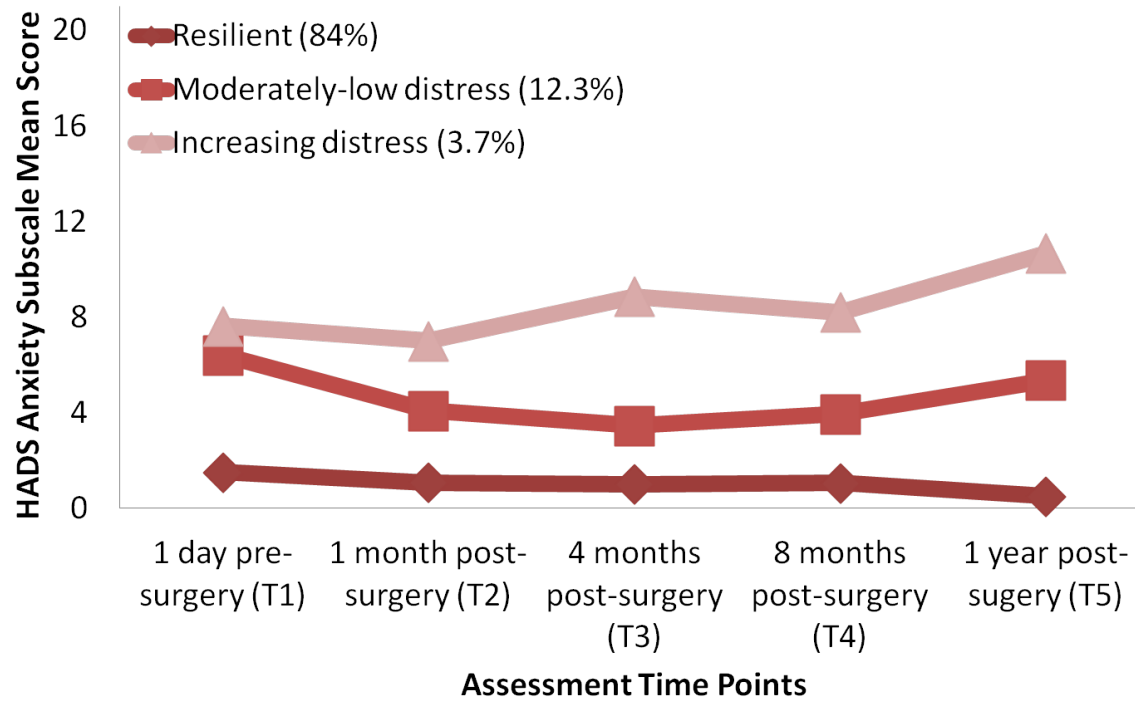
Howard Seltman
Carnegie Mellon University

Jakob de Vries
University Medical Center Groningen

Robbert Sanderman and Adelita V. Ranchor
University Medical Center Groningen



Trajectories of psychological distress among Chinese patients with colorectal cancer (n=232)



Trajectory patterns of distress from pre-surgery to 1 year post-surgery

Predictors of trajectory patterns (resilience as reference group)



Predictors for Anxiety	Moderately-low distress group				Persistent distress group			
	Resilient group as a reference group							
	OR	95% CI	SE	P-value	OR	95% CI	SE	P-value
Pre-surgical negative cancer-related intrusive thoughts	1.231	1.093; 1.385	0.060	0.001	1.303	1.021; 1.663	0.125	0.034
Pre-surgical physical symptom intrusiveness	1.095	0.996; 1.204	0.048	NS	1.216	0.976; 1.514	0.112	NS
Dispositional Optimism	0.974	0.925; 1.034	0.114	NS	0.531	0.292; 0.965	0.305	0.038

Predictors for Depression	Moderately-low distress group				Delayed distress group			
	Resilient group as a reference group							
	OR	95% CI	SE	P-value	OR	95% CI	SE	P-value
Pre-surgical negative cancer-related intrusive thoughts	1.158	1.006; 1.332	0.072	0.041	1.040	0.873; 1.239	0.089	NS
Pre-surgical physical symptom intrusiveness	1.241	1.112; 1.385	0.056	<0.001	1.118	1.013; 1.394	0.081	0.034
Dispositional Optimism	1.065	0.822; 1.380	0.132	NS	0.625	0.419; 0.931	0.204	0.021
Stage of disease								
Stage 0-II	1.214	0.352; 4.189	0.632	NS	0.126	0.021; 0.740	0.904	0.022
Stage III-IV		Referent				Referent		

*Insignificant predictors were excluded from the table, and these models were adjusted for covariates (including age, gender, marital status, educational level and occupation).

Psychological distress in cancer survivors

- Most patients were psychologically resilience in response to cancer diagnosis
- Chronic distress
 - Breast cancer 10% to 15%
 - Colorectal cancer 4% to 20%
 - Predictors
 - Poor social support
 - Poor personal resources (e.g. pessimism, low self-esteem, negative intrusive thoughts)
 - Unmanaged physical symptom distress
 - Poor satisfaction with treatment decision making



Impacts of chronic distress on long-term survivorship

Psycho-Oncology

Psycho-Oncology (2010)

Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/pon.1876

Distress trajectories at the first year diagnosis of breast cancer in relation to 6 years survivorship

Wendy W. T. Lam^{1*}, Yee Ting Shing¹, George A. Bonanno², Anthony D. Mancini³ and Richard Fielding¹

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Multiple regression modeling of predictors of 6-year psychosocial outcome measures

β values	HADS-A	HADS-D	CIES-R Intrusive	CIES-R Avoidance	CIES-R Hyper- arousal	ChSAS Family	ChSAS Self- image	ChSAS Appearance & Sexuality
Distress Trajectory	Referent	Referent	Referent	Referent	Referent	Referent	Referent	Referent
Resilient [†]								
Recovered [†]	0.02	-0.04	0.14*	0.10	0.08	0.03	-0.17*	-0.15*
Delay Recovery [†]	0.17**	0.05	0.15*	0.06	0.13	0.01	-0.05	-0.22**
Chronic Distress [†]	0.31**	0.22**	0.40***	0.25***	0.32***	-0.17*	-0.36***	-0.31***
C-LOT-R	-0.29**	-0.33***	-0.19**	-0.17*	-0.12	0.21**	0.20**	0.23**
GSES	-0.17**	-0.09	-0.07	0.05	-0.14*	0.09	-0.01	-0.01
EORTC								
Arm	0.06	0.03	0.06	-	-	-	-	-
Breast	0.22**	0.19**	0.19**	0.20**	0.21**	-	-0.04	-0.14*
Age	-0.22	-0.20**	-0.03	-	-	-	0.07	-
Marital Status								
Married	-	-	-	-	-	-	-	0.17**
Occupation								
Housewife	-0.22**	-0.22**	-0.35***	-0.19**	-0.19**	0.06	0.14*	0.10
Employed	Referent	Referent	Referent	Referent	Referent	0.05	-0.06	Referent
Unemployed	-0.04	0.01	Referent	Referent	Referent	Referent	Referent	-0.12
Retired	-0.05	-0.09	-0.20**	0.01	-0.12	-0.04	0.11	0.01
Breast Cancer recurrence	-	-	-	-	-	-	-0.15*	-0.14*

Distress trajectory: 1-8 months post-surgery. All variable measured concurrently at 6 years, except † based on 1-8 months distress trajectory. Significance: * <0.05 , ** <0.01 , *** <0.001

Implications



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- Cancer patients who experienced chronic distress during the acute phase reported the worst longer-term outcomes
- Interventions should be targeted to differentiate those who are at risk of chronic distress during the acute phase of illness trajectory
 - Ensuring optimal communications and decision-making support are essential
 - Assessing symptom distress and optimizing symptom management should be implemented at early post-operative phase
 - Screening patients with poor social and personal resources



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IPOS International Standard of Quality Cancer Care

July 2010 (Revised October 2014)

- 1. Psychosocial cancer care should be recognised as an universal human right**
- 2. Quality cancer care must integrate the psychosocial domain into routine care**

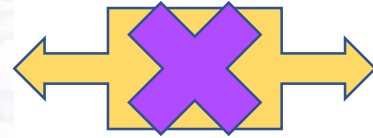
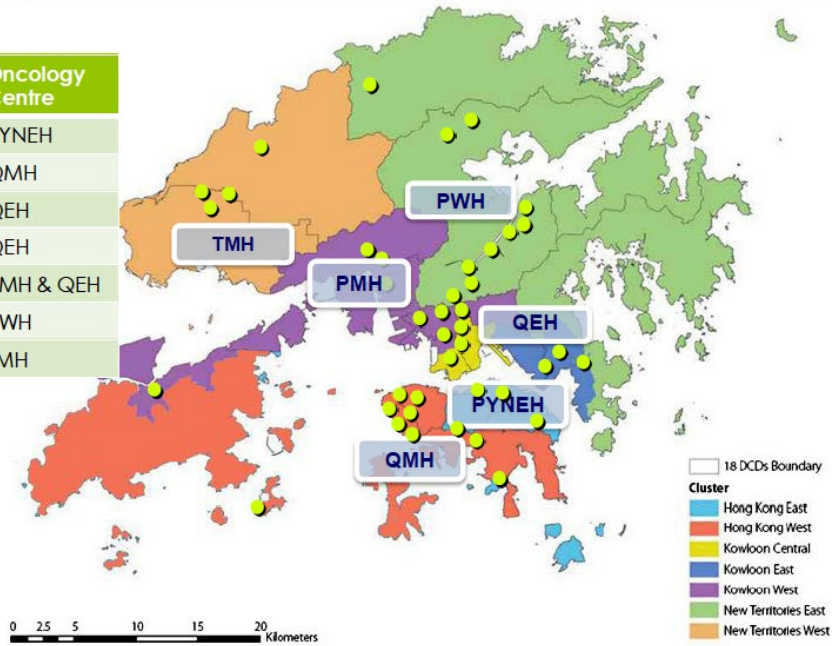
Psychosocial cancer care in Hong Kong

Distribution of Public Hospitals and 6 Clinical Oncology Centres in HA

HOSPITAL AUTHORITY

醫院管理局

Cluster	Oncology Centre
HKE	PYNEH
HKW	QMH
KC	QEH
KE	QEH
KW	PMH & QEH
NTE	PWH
NTW	TMH



Cancer support services in the community

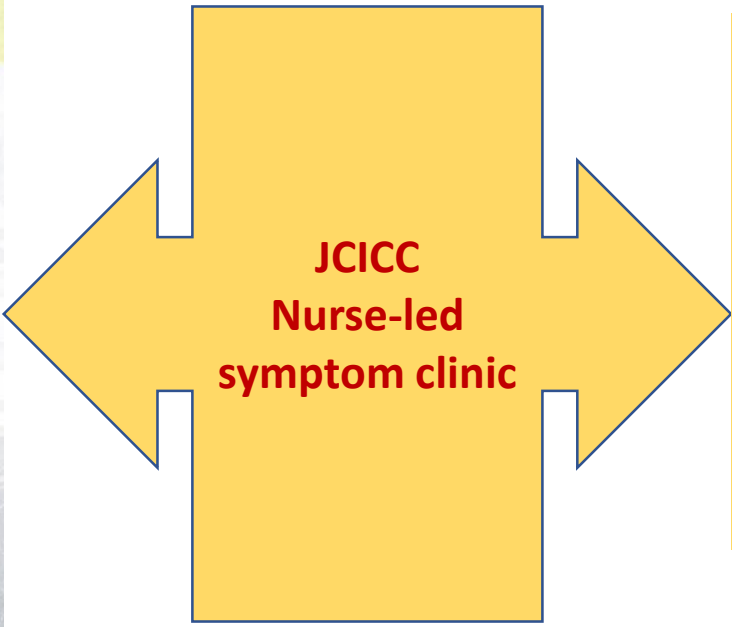
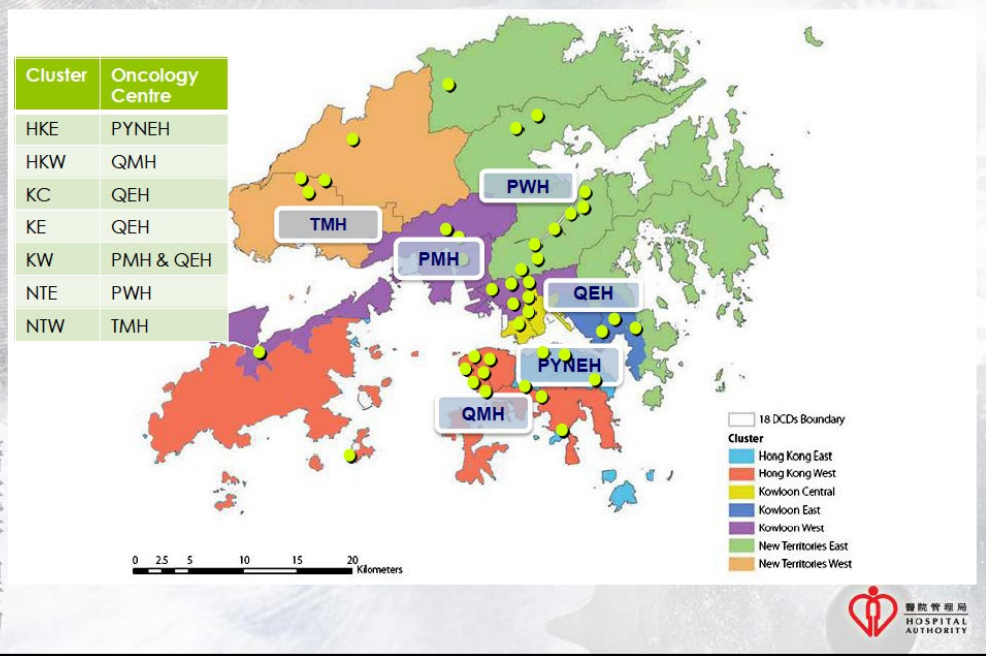


HKU Jockey Club Institute of Cancer Care (ICC)

- A critical platform to provide supportive care in collaboration with clinical oncology units and non-government organizations.
- Screening for psychosocial health need and symptom management services
 - Interventions addressing specific symptom distress
 - Cancer survivorship programme aiming to regain normalcy

New Initiatives

Distribution of Public Hospitals and 6 Clinical Oncology Centres in HA



Cancer support
 services in the
 community

HOSPITAL AUTHORITY
 醫院管理局

Step-Up Personalized Supportive Care (SUPer Care)



Edmonton Symptom Assessment System (ESAS)

HKU Jockey Club Institute of Cancer Care (JCICC)
香港大學賽馬會癌症綜合關護中心

受訪日期 _____

I. 初步評估: 以下是患者自我評估過去一星期的癥狀“感覺”的評分

疼痛 Pain 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

疲勞感-缺乏體力 Tiredness = lack of energy 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

困倦感-嗜睡 Drowsiness = feeling sleepy 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

反胃 Nausea 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

胃口欠佳 Lack of appetite 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

呼吸急促感 Shortness of breath 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

抑鬱感-感到沮喪 Depression = feeling sad 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

焦慮感-感到緊張不安 Anxiety = feeling nervous 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

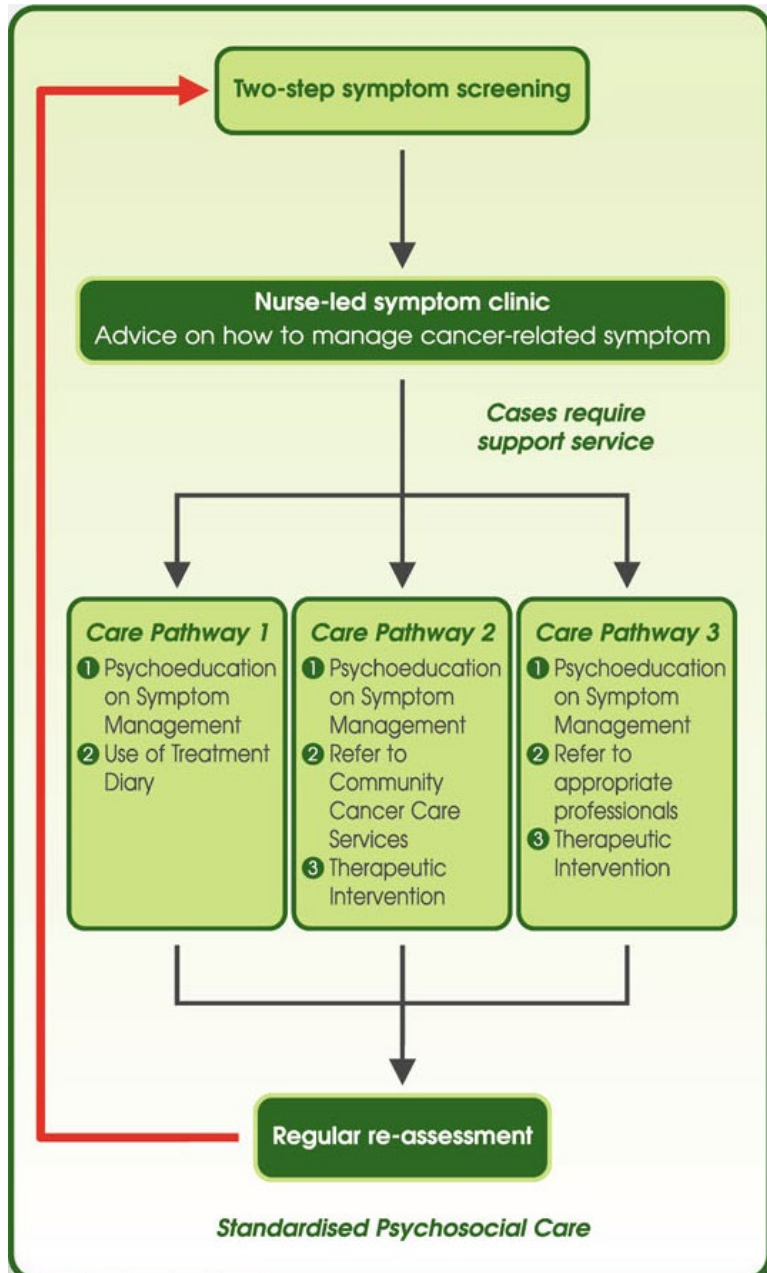
幸福感-你的整體感覺 Wellbeing = how you feel overall 0 1 2 3 4 5 6 7 8 9 10 極差
極強

睡眠困難 Sleep difficulty 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

手脚麻痺, 刺痛, 或麻痺的感覺 Numbness/tingling in hands and feet 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

其他問題 Other problem 0 1 2 3 4 5 6 7 8 9 10 極嚴重
沒有

SUPer Care Model





August 2018 – Nov 2020

Assessment	Number of patients to be screened	Number of patients who met the cut-off scores
ESAS assessment	2234	629 Non-case (Score <4) (28%) 779 Sub-clinical case (scores 4 -6) (35%) 826 cases (scores ≥7) (37%) - 590 (71.4%) consent for service
PSQI (Pittsburg sleep Quality Inventory)	339	318 (94%) (scores ≥ 5 greater)
BFI (Brief fatigue inventory)	209	37 (17.7%) (score ≥ 7)
ID Pain – neuropathy	220	71 (32.3%) (score ≥3)
Pain (Brief pain inventory)	120	112 (93.3%) (current pain severity score ≥5)
HADS (Hospital anxiety and depression scale)	403	A: 94 (score 8-10– borderline) (23.3%)
		A: 94 (score >11 – clinical case) (23.3%)
		D: 80 (score 8-10 –borderline) (20%)
		D: 98 (score >11 – clinical case) (24.3%)
FCR (Fear of cancer recurrence)	137	88 (score ≥13) (63.8%)
Appetite (Council of Nutrition Appetite Questionnaire)	65	31 (score ≤ 28) (47.7%)

Patient Characteristics



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	Non case/refuse for service [n=1644]	Consent to service (Case) [n=590]
Age (mean)	60.42±17.97	59.1±11.57
Gender		
Male	414 (25.2%)	156 (26.4%)
Female	730 (44.4%)	433 (73.4%)
Missing	500 (30.4%)	1 (0.2%)
Marital Status		
Single	149 (9.1%)	63 (10.7%)
Married/Cohabited	826 (50.2%)	299 (50.7%)
Divorced/Separated	88 (5.4%)	48 (8.1%)
Widowed	77 (4.7%)	25 (4.2%)
Missing	504 (30.7%)	155 (26%)
Educational level		
No formal education or primary education	460 (28%)	137 (23.2%)
Secondary education	731 (44.5%)	270 (45.8%)
Tertiary education	428 (26%)	170 (28.8%)
Missing	25 (1.5%)	13 (2.2%)

Patient Characteristics

	Non case or refuse for service [n=1644]	Consent to service (Case) [n=590]
Cancer type		
Breast	448 (27.3%)	226 (38.3%)
CRC	598 (36.3%)	157 (26.6%)
Lung	215 (13.2%)	91 (15.4%)
Gynaecology	85 (5.2%)	58 (9.5%)
Head and neck	124 (7%)	27 (4.7%)
Gastrointestinal / Hepatobiliary	51 (3.2%)	10 (1.7%)
Sarcoma	20 (1.3%)	7 (1.2%)
Neurological	15 (1.1%)	4 (0.7%)
Others	73 (4.4%)	10 (1.8%)
Missing	15 (1%)	0 (0%)

Patients who refused for service

Focus assessment	Number of patients who met screening (ESAS \geq 7) cut off	No. of patients who met the cut-off scores
PSQI (Pittsburg sleep Quality Inventory)	114	74 (score \geq 5) (65%)
Fatigue – BFI	67	0 (score \geq 7)
ID Pain - neuropathy	63	3 (score \geq 3) (5%)
Pain – BPI	24	10 (#3 score \geq 5) (42%)
Anxiety and Depression – HADS	129	<p>Anxiety: 4 (score 8-10 – borderline) (3%) 6 (score \geq 11 – clinical case) (5%)</p> <p>Depression: 5 (score 8-10 – borderline) (4%) 5 (score \geq 11 – clinical case) (4%)</p>
Fear of cancer recurrence - FCR	64	2 (score \geq 13) (3%)
Appetite – Council of Nutrition Appetite Questionnaire	18	2 (score \leq 28) (11%)

ESAS score distribution by symptoms for cases (n=590)

Symptoms/ESAS score	0-3	4-6	≥7	Total
Pain	336 (56.9%)	134 (22.7%)	120 (20.3%)	590
Tiredness	148 (25.1%)	233 (39.5%)	209 (35.4%)	590
Drowsiness	199 (33.8%)	202 (34.3%)	188 (31.9%)	589
Nausea	492 (83.5%)	72 (12.2%)	25 (4.2%)	589
Lack of appetite	401 (68.1%)	136 (23.4%)	52 (8.8%)	589
Shortness of breath	388 (66%)	150 (25.5%)	50 (8.5%)	588
Depression	272 (46.1%)	185 (31.4%)	133 (22.5%)	590
Anxiety	268 (45.4%)	175 (29.7%)	147 (24.9%)	590
Wellbeing	263 (44.8%)	216 (36.8%)	108 (18.4%)	587
Sleep difficulty	205 (34.7%)	150 (25.4%)	235 (39.8%)	590
Numbness	228 (38.8%)	140 (23.8%)	220 (37.4%)	588

JCICC Triage Pathway (n=590)

Pathway 1 Provide psychoeducation for self-management	337	57.1%
Pathway 2 Group activity (outside or in-house)	41	7%
Pathway 3 In depth one to one specialty consultation	212	35.9%

Summary

- 1 in 3 cancer survivors screened were identified as cases for symptom distress.
- The most common symptoms included sleep disturbance, numbness, fatigue and anxiety.
- Most cases consented for receiving interventions and follow-up in managing the unmet needs.
- 1 in 3 who are identified as distressed but decline professional help.
- Implementation research is needed to assess the impact of screening for symptom distress on the well-being of patients.



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