Validation of psychological screening measures for palliative care

Dr. Kitty Wu

Department Manager (Clinical Psychology) Kowloon West Cluster

Co-investigators from various clusters

Dr. Damaris HUNG

Department of Clinical Psychology, Queen Mary Hospital & Grantham Hospital, HK West Cluster

Ms. Mary WONG

Department of Clinical Psychology, Pamela Youde Nethersole Hospital, HK East Cluster

Dr. Valda CHO

Department of Clinical Psychology, Caritas Medical Centre, Kowloon West Cluster

Ms. Queenie KWAN

Department of Clinical Psychology, TWGHs Wong Tai Sin Hospital, Kowloon East Cluster

Psychosocial Care Framework for PC

Recognition of psychosocial needs Level 1 Early identification of Use of Level 2 standardized psychosocial distress measures Level 3 **Assess & intervention for distress** Level 4 Diagnosis of psychopathology

Methods

Phase I

• Screening measures were completed by patients and caregivers.

w/in 1-week

Phase II

 Clinical interviews were independently conducted by clinical psychologists (CP) to determine if CP follow-up is needed.

Results of screening measures (Phase I) and clinical interviews (Phase II) were compared

Measures

cutoff indicating moderate to severe distress adopted except for DT and DADDS

- 1. Patient Health Questionnaire (PHQ-9) (Kroenke, Spitzer, & Williams, 2001)
- General Anxiety Disorder Scale (GAD-7) (Spitzer et al., 2006).
- 3. Psychological Wellbeing Scale (PWS) (Wu & Cho, 2007; Wu et al., 2010) Patient version (PWS-P) & Carer version (PWS-C)
- 4. Depression Anxiety Stress Scale (DASS) (Lovibond & Lovibond, 1995)
- 5. Distress Thermometer (DT \geq 4) (Roth et al., 1998)
- 6. Death and Dying Distress Scale (DADDS no cut-off) (Lo et al., 2011)

Participants

- Patients and family carers served in 5 PC units (Jul 2018 – Apr 2019)
- Cantonese speaking Hong Kong resident
- Adult (18 or above)

Patients

n = 121

Family carers n = 104

Patients (n=121)

Mean age (range): 69.3 yrs (25 - 95)

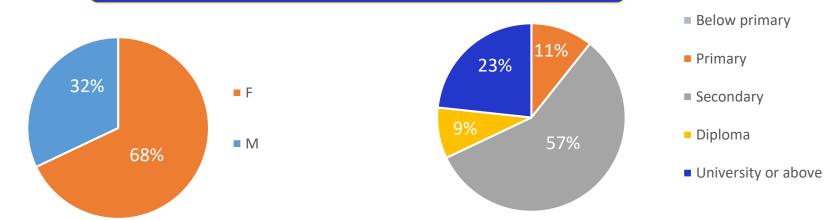
Sex

Education level

2%
9%
10%
Primary
Secondary
Secondary
Diploma
University or above

Family caregivers (n=104)

Mean age (range): 55.8 yrs (18 - 86)



Results : Patients Correlations among the screening measures

Significant correlations among the screening measures completed by patients

		CAD 7	PHQ-9		DADDO			
		GAD-7		SS	LM	ED	НС	DADDS
PHQ-9		.68***						
PWS-P subscale	SS	30"	33***	-				
	LM	22	30"	.44""				
	ED	.60***	.55***	35***	23			1400
	НС	20°	27"	.22*	.45***	21		
DADDS		.51""	.46***	31"		.60***		
DT		.54***	.51***	21 [*]	25 ["]	.64***		.36***

Note. * *p* < .05, ** *p* < .01, *** *p* < .001

GAD-7 = Generalized Anxiety Disorder-7 Scale

PHQ-9 = Patient Health Questionnaire-9 Scale

PWS-P = Psychological Wellbeing Scale-Patient

PWS-C = Psychological Wellbeing Scale- Caregiver

SS = Social Support

LM = Life Meaning

ED = Emotional Distress

CI = Caregiving Inadequacy

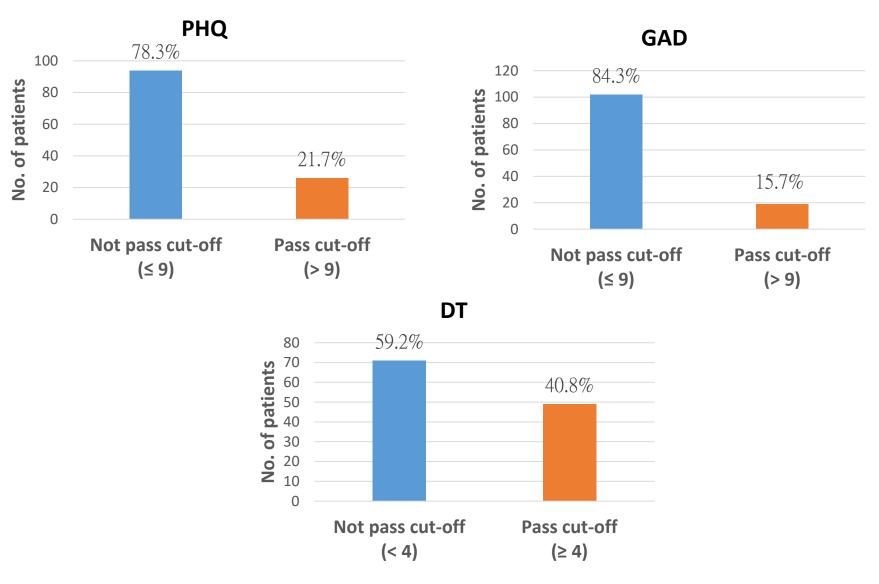
HC = Hospital Care

DADDS = Death and Dying Distress Scale

DT = Distress Thermometer

DASS = Depression Anxiety Stress Scale

Results: Patients % with moderate-to-severe distress

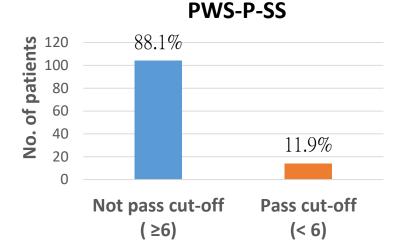


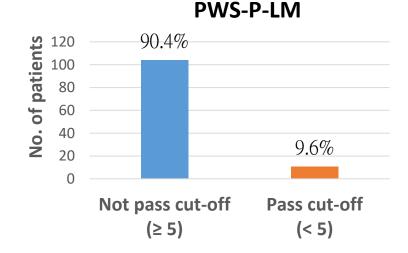
GAD-7 = Generalized Anxiety Disorder-7 Scale PHQ-9 = Patient Health Questionnaire-9 Scale

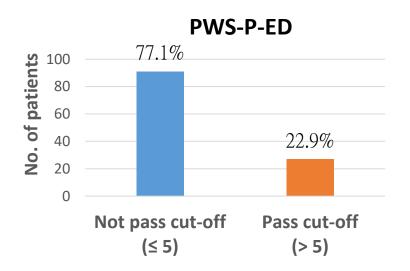
DT = Distress Thermometer

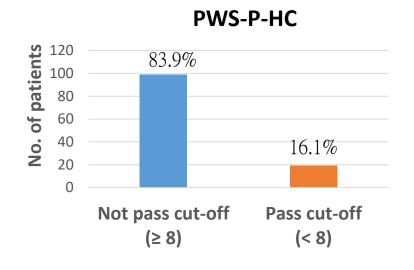
Results: Patients

% with moderate-to-severe distress





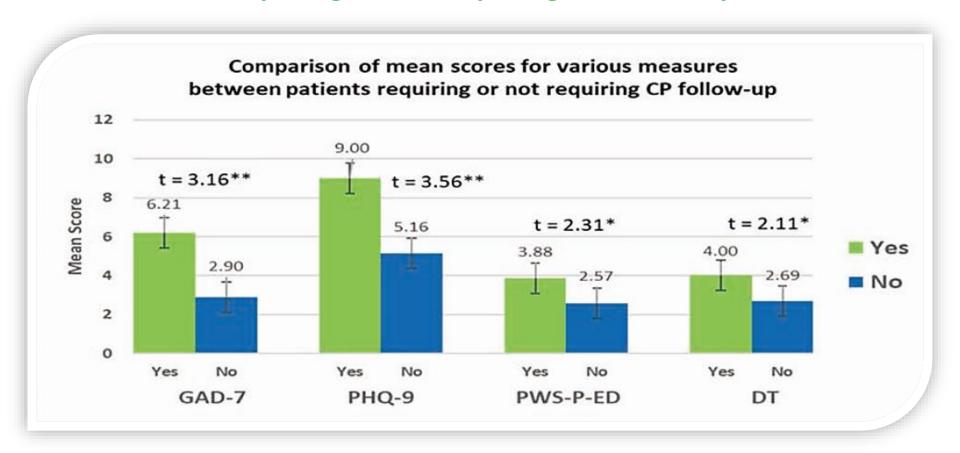




PWS-P = Psychological Wellbeing Scale-Patient SS = Social Support LM = Life Meaning

ED = Emotional Distress HC = Hospital Care

Results: Patients requiring or not requiring CP follow-up



Note. * p < .05, ** p < .01, *** p < .001

GAD-7 = Generalized Anxiety Disorder-7 Scale

PHQ-9 = Patient Health Questionnaire-9 Scale

PWS-P = Psychological Wellbeing Scale-Patient

ED = Emotional Distress DT = Distress Thermometer

Accuracy, specificity and sensitivity for identifying needs of CP follow-up

Patients							
	Accuracy	Specificity	Sensitivity				
PHQ	69.3%	88.6%	38.6%				
GAD	67.8%	91.5%	29.5%				
PWS-P-ED	65.2%	84.1%	34.9%				
PWS-P-LM	65.1%	94.1%	17.1%				
PWS-P-SS	62.5%	91.3%	16.3%				
PWS-P-HC	61.6%	87.0%	20.9%				
DT	64.0%	70.0%	54.5%				

Results: Family carers Correlations among the screening measures

Significant correlations among the screening measures completed by caregivers

		GAD-7	PHQ-9	PWS-C subscale					
				SS	LM	ED	CI	НС	DASS
PHQ-9		.84***							
PWS-C subscale	SS		20°						
	LM	36***	43***	.50***				= =	
	ED	.61""	.54""	22	41""				
	CI		.26"	23	28"	.23			
	НС			-	.42***	-	=		
DASS		.76"	.81""	30"	50***	.59***	.32"	-	
DT		.64""	.67"	25	35***	.58***	.23*		.59"

Note. * *p* < .05, ** *p* < .01, *** *p* < .001

GAD-7 = Generalized Anxiety Disorder-7 Scale

PHQ-9 = Patient Health Questionnaire-9 Scale

PWS-P = Psychological Wellbeing Scale-Patient

PWS-C = Psychological Wellbeing Scale- Caregiver

SS = Social Support

LM = Life Meaning

ED = Emotional Distress

CI = Caregiving Inadequacy

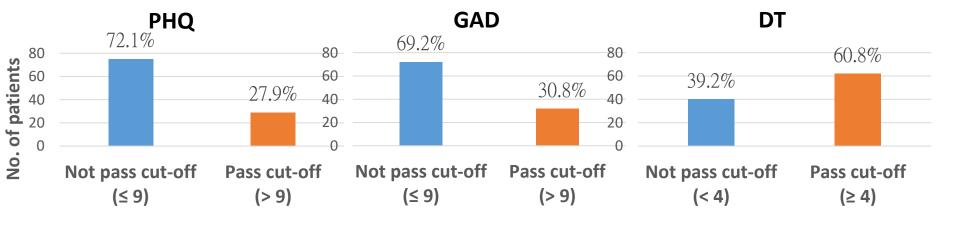
HC = Hospital Care

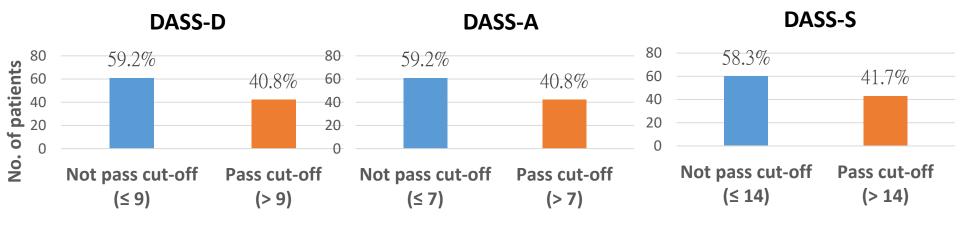
DADDS = Death and Dying Distress Scale

DT = Distress Thermometer

DASS = Depression Anxiety Stress Scale

Results: Family carers % with moderate-to-severe distress

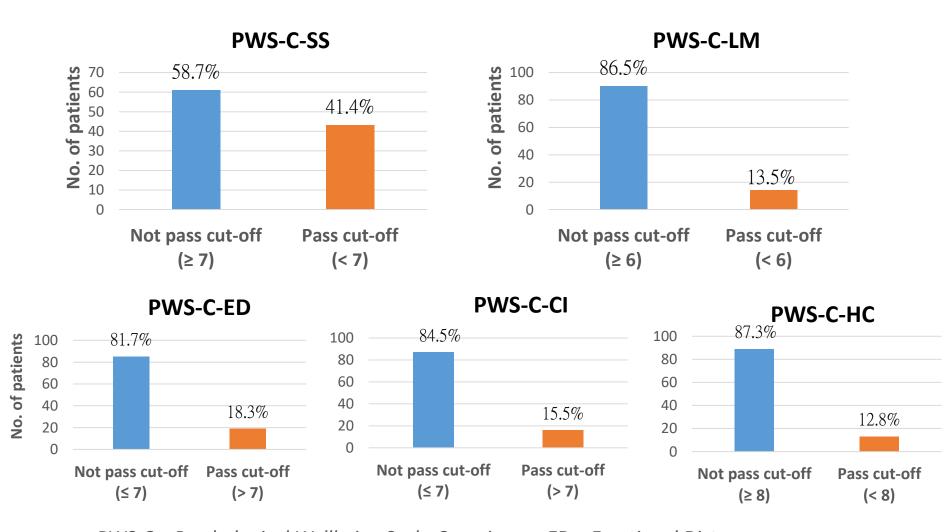




GAD-7 = Generalized Anxiety Disorder-7 Scale PHQ-9 = Patient Health Questionnaire-9 Scale DT = Distress Thermometer

DASS = Depression Anxiety Stress Scale

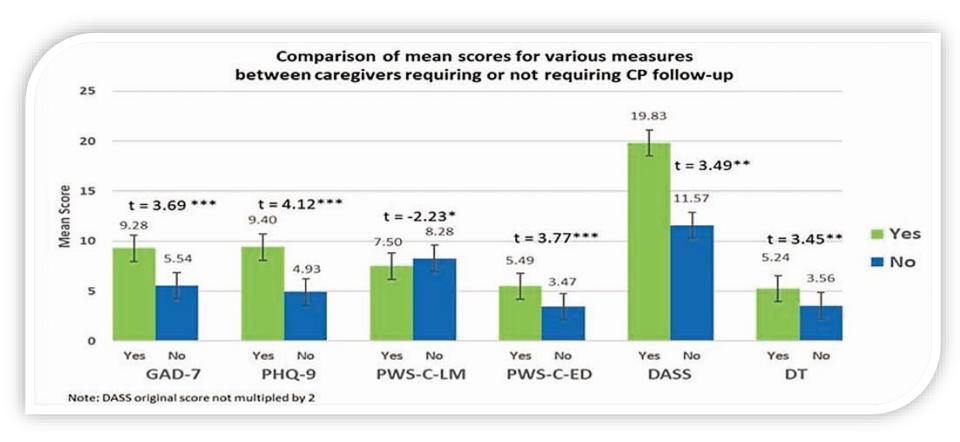
Results: Family carers % with moderate-to-severe distress



PWS-C = Psychological Wellbeing Scale-Caregiver SS = Social Support LM = Life Meaning

ED = Emotional Distress
CI = Caregiving Inadequacy
HC = Hospital Care

Results: Family carers requiring or not requiring CP follow-up



Note. * *p* < .05, ** *p* < .01, *** *p* < .001

GAD-7 = Generalized Anxiety Disorder-7 Scale

PHQ-9 = Patient Health Questionnaire-9 Scale

PWS-C = Psychological Wellbeing Scale- Caregiver

LM = Life Meaning

ED = Emotional Distress

DT = Distress Thermometer

DASS = Depression Anxiety Stress Scale

Accuracy, specificity and sensitivity of screening measures for identifying needs of CP follow-up

Family Carers							
	Accuracy	Specificity	Sensitivity				
PHQ	67.3%	87.0%	44.7%				
GAD	64.4%	81.5%	44.7%				
PWS-C-ED	65.3%	94.4%	31.9%				
PWS-C-LM	61.4%	94.4%	23.4%				
PWS-C-SS	60.4%	66.7%	53.2%				
PWS-C-HC	59.6%	92.6%	20.0%				
PWS-C-CI	53.0%	85.2%	15.2%				
DT	60.6%	50.0%	73.3%				
DASS-D	66.0%	73.6%	57.4%				
DASS-A	63.0%	71.7%	53.2%				
DASS-S	65.0%	71.7%	57.4%				

Conclusion

- 1. The standardized measures studied were related with moderate correlations suggesting satisfactory construct validity
- 2. Distress Thermometer ≥ 4
 - patients (41%)
 - family carers (61%)
- 3. Passed cut-off of moderate-severe distress in other measures
 - patients (10-23%)
 - family carers (13-42%)
- 4. Standardized psychological screening measures examined could assist identification of service needs & monitoring outcomes for patients and family caregivers served in PC units
 - low sensitivity rates (moderate-severe distress in a self-report measure could be a help seeking signal not revealed in a face-to-face interview)

