### Abstract

**Background:** Thai culture traditionally abhors elders living in care homes due to the belief that this represents a dereliction of filial piety by their children, thus care homes are stigmatized as the domain of poor older adults with no family. This may impact negatively on psychological wellbeing of residents, although little is known about the key factors influencing depressive symptoms. Therefore, this study explores factors associated with depressive symptoms, internalised stigma, self-esteem, social support and coping strategies among older adults residing in care homes in Thailand.

**Method/Design:** A cross-sectional questionnaire study was conducted with 128 older residents recruited from two care homes in Northeast Thailand. Data were collected using the 15-Item Thai Geriatric Depression Scale, Internalised Stigma of Living in a Care Home Scale, Thai Version of Rosenberg Self-Esteem Scale, Thai Version of Multidimensional Scale of Perceived Social Support and the Coping Strategies Inventory Short-Form.

**Results:** Depressive symptoms were significantly correlated with internalised stigma, self-esteem and social support (r = 0.563, -0.574 and -0.333) (p < 0.001), respectively. Perceived internalised stigma of living in a care home was the strongest predictor of care home residents reporting depressive symptoms (odds ratio=9.165).

### Discussion:

Older adults who perceived high internalised stigma of living in a care home were over nine times as likely to report experiencing depressive symptoms. Efforts to decrease or prevent perceived internalised stigma might help to reduce depressive symptoms. Interventions might include media collaboration, educational interventions in the care home setting and organising social activities for residents and their families.

Keywords: Care home, Depression, Internalised stigma, Older adults

### Introduction

Depression is common among older adults residing in care homes worldwide, with an average prevalence rate of 14.4% (systematic review: Polyakova et al., 2014); in Thailand reported rates are significantly higher, up to 24% (Wongpakaran and Wongpakaran, 2012, 2013). Experience of depression in care home residents may be associated with the impact of physical and psychological illness (Tsai et al., 2005, Ganatra et al., 2008), social isolation (Scocco et al., 2006, Drageset et al., 2012), poor social support (Drageset et al., 2011), negative coping strategies and stigma specifically associated with living in care homes (Fisher, 1990, Dobbs et al., 2008).

Stigma is experienced when members of society hold a set of negative beliefs towards an individual who belongs to one or more groups that are commonly viewed unfavourably (Goffman, 1963). Living in a care home is a risk factor for perceived stigma (Fisher, 1990, Dobbs et al., 2008), particularly in conservative Asian cultures such as Thailand, where it is viewed as a mark of social shame on older parents not to be cared for by family members, and on the younger generation not to care for one's aged parents personally (Choowattanapakorn et al., 2004). Some families believe that a residential care home is a place only for older people who have no family (Choowattanapakorn et al., 2004). In addition, 93% of elderly parents expect their children to take care of them when they get older (Philips, 2002). Recent research conducted in a rural district in Northeast Thailand suggested that the value of familial responsibility for older adults reinforces the expectation of filial care from children (Rittirong et al., 2014). These beliefs may influence negative perceptions of living in a care home among older residents and impact on their psychological wellbeing, lowering self-esteem, and increasing feelings of isolation, selfharm and depression. However, the evidence for this is scarce, and little is known about the key factors influencing the experience of depressive symptoms. The biopsychosocial model (Engel, 1980, 1989; Borrell-Carrió et al., 2004; Sarafino and Smith, 2014) was used in a holistic approach to identify the factors associated with depressive symptoms among participants. These included: physical impairment or disability (biological influences); social support and perceive internalised stigma (social-cultural influences);

self-esteem and coping strategies (psychological influences). An improved understanding of the relationship between these factors and depressive symptoms is required to inform the development of future intervention to prevent or decrease depressive symptoms in older care home residents.

This study aimed to investigate: [1] the demographic characteristics of older adults living in care homes in Thailand; [2] levels of depressive symptoms, internalised stigma, selfesteem, social support and coping strategies among older adults living in care homes; [3] the relationship between depressive symptoms, stigma associated with living in a care home, self-esteem, perceived social support and coping strategies of older adults residing in care homes; and [4] factors predicting depressive symptoms among older adults residing in care homes.

### **Materials and Methods**

A cross-sectional questionnaire study was conducted in two care homes in Northeast Thailand (Isan). Data were collected between 10 July 2015 and 15 November 2015.

### Participants

Older adults were selected according to the following eligibility criteria: Thai adults aged 60 years and above; fluency in Thai language; absence of severe cognitive impairment or severe psychological disturbance (which may have prevented comprehension of the study information sheet and completion of the questionnaire). A total of 128 residents consented to take part in the study from two care homes, with a response rate of 98.46%.

## Procedure

Ethical approval for the study was obtained prior to data collection from a University Institutional Review Board in The UK (Ref: OVSa16042015 SoHS) and a Hospital Institutional Review Board in Thailand (Ref: 053/2015). Permission to approach residents was obtained from the head of each care home. Screening for eligible residents was undertaken by care home staff. A range of strategies were adopted to maximise recruitment. These included: an advertisement during meal times, an incentive raffle ticket for a prize draw, and follow up contact from the researcher with eligible residents. All eligible residents who expressed their interest in participating in the study were approached face-to-face by a nurse researcher, who explained the study purpose and procedures. Eligible residents who agreed to take part in the study were asked to provide their written, informed consent. They were informed that participant anonymity would be preserved and that they could withdraw from the study at any time without giving a reason. Data were obtained through single face-to-face structured questionnaire interview conducted by the nurse researcher, taking approximately one hour per interviewee.

### **Research Measurements**

The questionnaire consisted of six parts. Section 1 included personal demographic characteristics: age, gender, marital status, religion, highest qualification, length of time the participant had lived in a care home, frequency of visitors, general health problems and reason for living in the care home. Sections 2-6 included the following questionnaire measures: the 15-Item Thai Geriatric Depression Scale (Wongpakaran and Wongpakaran, 2012), Thai Version of Internalised Stigma of Living in a Care Home Scale (Tosangwarn et al., 2016), Thai Version of Rosenberg Self-Esteem Scale (Wongpakaran and Wongpakaran, 2010), Thai Version of Multidimensional Scale of Perceived Social Support (Wongpakaran et al., 2011) and the Thai Version of Coping Strategies Inventory Short Form (Tosangwarn et al., 2016). The questionnaires were pilot tested with 15 older adults of a similar age range, to determine the feasibility of data collection using these measures and to verify the approximate length of time to complete.

### The 15-Item Thai Geriatric Depression Scale (15-TGDS)

Depressive symptoms were measured using the 15-TGDS (Wongpakaran and Wongpakaran, 2012). The Geriatric Depression Scale (GDS) was first created by Yesavage et al. (1983). The Short-Form GDS (15 items) is easier to use for older adults residing in a care home who have physical illness and mild-to-moderate cognitive impairment (i.e. due to short attention spans or feeling easily fatigued) (Yesavage and Sheikh, 1986). Of the 15 items, questions 1, 5, 7, 11, 13 indicate depression when answered negatively; the remainder indicate depression when answered positively. It takes about five to seven minutes to complete. Scores of 0-4 are considered normal; 5-8 indicate mild depression;

9-11 indicate moderate depression; and 12-15 indicate severe depression. The validity and reliability of the 15-TGDS has been demonstrated (Yesavage and Sheikh, 1986). The Thai version shows good internal consistency (n=130; Cronbach's alpha = 0.85) (Wongpakaran and Wongpakaran, 2012).

# *Thai version of Internalised Stigma of Living in a Care Home Scale (Thai version of IS-LCH Scale)*

Perceiving internalised stigma of living in a care home was assessed using the Thai Version of IS-LCH Scale, adapted from the Thai Version of Internalised Stigma of Mental Illness Scale (ISMI) (Wong-Anuchit et al., 2016). The ISMI was created by Boyd et al. (2003) and has been widely used in 55 versions in many different countries (Boyd et al., 2014). The Thai Version of IS-LCH consists of 26 items, answerable on a four-point Likert scale (1 = strongly disagree, 4 = strongly agree). It takes approximately 15 minutes to complete. Higher scores indicate increased internalised stigma of living in a care home; the mean scores of 1.00 to 2.00 are considered minimal-to-no internalised stigma; 2.01 to 2.50 indicate mild internalised stigma; 2.51 to 3.00 indicate moderate internalised stigma and 3.01 to 4.00 indicate high internalised stigma (Lysaker et al., 2007). Thai version of IS-LCH Scale has good internal consistency with a reported Cronbach's alpha of 0.87, and a reported Intraclass Correlation Coefficient of 0.90 for the entire scale (Tosangwarn et al., 2016).

### Thai version of Rosenberg Self-Esteem Scale (Thai version of RSES)

Self-esteem was measured using the Thai-RSES (Wongpakaran and Wongpakaran, 2010). The RSES (1965) is a globally utilised self-esteem measure. It has been used in diverse populations and has been subject to more psychometric analysis and empirical validation than any other self-esteem measure (Robins et al., 2001).

The Thai-RSES is a 10-item questionnaire with a four-point Likert scale ranging from "strongly agree" to "strongly disagree". It takes around five minutes to complete. Higher scores are associated with higher levels of self-esteem. Scores <15 are considered low self-esteem; 15 to 25 indicate average self-esteem; and scores >25 indicate high self-esteem (Cabrillo College, 2016). The Thai-RSES has been tested for reliability and validity

and showed good internal consistency (n=479; Cronbach's alpha = 0.87) (Wongpakaran and Wongpakaran, 2010).

# *Thai version of Multidimensional Scale of Perceived Social Support (Thai version of MSPSS)*

Perceived social support was assessed using the Thai-MSPSS (Wongpakaran et al., 2011). The aim of this measure is to assess perceptions of social support adequacy from three specific sources, including family, friends and significant others (ibid). The MSPSS was developed by Zimet et al. (1988). The MSPSS is a briefly administered self-reported questionnaire comprising 12 items rated on a seven-point Likert-type scale: Significant Others (SO) (items 1, 2, 5, and 10); Family (FA) (items 3, 4, 8, and 11) and Friends (FR) (items 6, 7, 9, and 12). The scores of the MSPSS range from 'very strongly disagree' (1) to 'very strongly agree' (7). It takes approximately seven to ten minutes to complete. A higher score on the MSPSS is associated with greater perceived social support. Scores ranging from 1 to 2.9 are considered low support; 3 to 5 indicates moderate support; and 5.1 to 7 indicates high support (Zimet et al., 1988).

The Thai translation of the MSPSS was tested for reliability and validity with 462 adult participants (310 medical students and 152 psychiatric patients) and showed good internal consistency (Cronbach's alpha = 0.91 in the student group and Cronbach's alpha = 0.87 in the patient group) (Wongpakaran et al., 2011).

# Thai Version of a Coping Strategies Inventory Short Form (Thai Version of CSI-SF)

Coping strategies of older residents were assessed using the Thai Version of CSI-SF (Addison et al., 2007). The scale was developed to evaluate coping responses based on coping target and directionality of response. The original CSI was constructed as a 78-item questionnaire (Tobin et al., 1989), shortened to a 16-item version (CSI-SF) (Addison et al., 2007). The CSI-SF includes a 16-item survey answerable on a five-point Likert scale (1= never, 2= seldom, 3= sometimes, 4=often and 5= almost always). It takes approximately ten minutes to complete. Higher scores indicate greater coping skills. The CSI-SF was tested for reliability and validity on 5,302 African-Americans between the ages of 35 to 84, and demonstrated acceptable reliability (with Cronbach's alpha values

between 0.58 and 0.72) (Addison et al., 2007). The Thai Version of CSI-SF has acceptable internal consistency with Cronbach's alpha of 0.78 (Tosangwarn et al., 2016)

### Data analysis

Data were analysed using the Statistical Package for Social Science (SPSS) IBM PASW Version 22.0 for Windows. Descriptive statistics including means, standard deviations and frequency distributions were used to describe the characteristics of participants and other variables including depressive symptoms, internalised stigma, self-esteem, social support and coping strategies (objectives one and two). Pearson's product moment correlation was used to examine the relationship between measures (objective three). Multiple logistic regression was used to determine predictors of depressive symptoms (DV). Independent variables (IVs) included gender, age, whether participants were diagnosed with one or more diseases (comorbidities), level of internalised stigma of living in a care home and perceived social support (objective four).

### Results

Questionnaires were completed by 128 older adults, residing in two care homes in Northeast Thailand. Participants were aged from 61-96 years (mean= 76.86, SD= 7.783; 62.5% female, n=128). Reasons for living in a care home included health issues (32%, n=41), family conflict (27.3%, n=35), poverty (25.8%, n=33), no family (6.3%, n=8), loneliness (4.7%, n=6) and being abandoned by their families (3.9%, n=5).

Overall, 41.4% of care home residents were experiencing depressive symptoms as measured by the 15-TGDS (n=128). Most of these participants' symptoms were mild, with the remainder having moderate (3.9%, n=5) or severe depressive symptoms (6.3%, n=8). In addition, the vast majority of the sample perceived some level of internalised stigma from living in a care home (92.3%, n=118). One quarter of those reporting internalised stigma perceived this to be moderate or severe stigma (25.46%, n=30).

The majority of the sample (89.8%, n=115) reported having normal or high self-esteem. Low self-esteem was evident only in a minority of participants in both care homes (10.2%, n=13). In addition, the majority of participants in both care homes perceived that they had low or moderate levels of social support (80.5%, n=103). Just over one-fifth of participants perceived that they had low social support (21.9%, n=28).

Care home residents more commonly used emotion-focused disengagement coping strategies (M=11.13, SD=3.37) to cope with unpleasant or stressful situations, compared with other strategies. Emotion-focused engagement strategies (M=8.73, SD=3.19) were less commonly used in this sample compared with other coping strategies. Participant characteristics are provided in Table 1.

(Insert table 1 about here).

### Relationship between depressive symptoms and other variables

Self-esteem and perceived social support were significantly and negatively correlated with depressive symptoms (r=-0.574, p< 0.001; and r=-0.333, p< 0.001, respectively). Therefore, participants with higher self-esteem and greater social support reported lower levels of depressive symptoms. Internalised stigma of living in a care home was significantly positively correlated with depressive symptoms (r=0.563; p< 0.001), indicating that participants with a higher level of internalised stigma of living in a care home also reported a higher level of depressive symptoms. Table 2 shows the correlations between depressive symptoms and other variables.

(Insert table 2 about here).

### **Predictors of depressive symptoms**

The full model containing all predictors was statistically significant, with  $\chi^2$  (5, N= 128) = 33.618, p< 0.001, indicating that the model was able to distinguish between respondents who reported depressive symptoms and those who did not. The model as a whole explained between 23.1% (Cox and Snell R square) and 31.1% (Nagelkerke R Square) of the variance in experiencing some level of depressive symptoms, and correctly classified 75% of cases. As shown in table 2, only two independent variables (perceived internalised stigma of living in a care home and perceived social support) made a unique statistically significant contribution to the model. Perceived internalised stigma of living in a care home

was the strongest predictor of depressive symptoms, resulting in an odds ratio of 9.165. This indicates that respondents who reported high internalised stigma of living in a care home were approximately nine times more likely to report experiencing depressive symptoms than those who did not, controlling for all other factors in the model.

(Insert table 3 about here).

### Discussion

The purpose of this study was to explore the factors associated with, and predictive of, depressive symptoms among older adults residing in care homes in Thailand. Depressive symptoms were prevalent in this sample (41.5% reported mild, moderate or severe depressive symptoms). Although previous studies providing rates of depressive symptoms have used different measures and therefore may not be directly comparable, the rate observed here was higher than prevalence rates found previously in a care home in Thailand (38.4%) (Wongpakaran et al., 2013) and higher than those found in other cultural settings such as England and Wales (27.1%) (McDougall et al., 2007). In our study, depressive symptoms were not related to care home resident's socio-demographic characteristics or perceived health characteristics.

The evidence suggests that in Thailand, older adults residing in a care home are more prone to suffer from depressive symptoms than older adults living in the community where prevalence rates have been found to be around 22% (e.g. Abas et al. 2013). This may relate to the preferences and expectations of older people that they will be cared for by their families, which is highly influenced by social norms and the Thai cultural value of family responsibility (Rittirong et al., 2014). In this study, participants reported that they felt *compelled* to live in a care home (i.e. it was not their ideal choice) due to health issues, family conflict, poverty, no family, loneliness and being abandoned by their families.

These issues may themselves evoke negative self-perceptions and negative opinions from others, amounting to a social devaluation of older adults residing in care homes. Older people may experience or perceive stigma due to feeling rejected by their communities or their families (Wongpakaran and Wongpakaran, 2012). Consequently, older residents may perceive themselves to be unattractive and devalued in the eyes of others, with low social identity and value, as a result of the perceived and internalised stigma of living in a care home.

This study shows that perceived internalised stigma was evident in almost all of the care home residents (92.3%). This has important implications for psychological wellbeing, since internalised stigma was highly correlated with depressive symptoms, and was the strongest predictor of depressive symptoms when adjusting for gender, age, comorbidity and perceived social support. These findings suggest that depressive symptoms in older adults residing in a Thai care home are more likely to be related to perceived internalised stigma of living in a care home than functional impairment, disability, or perceived support from others. Perceived internalised stigma of living in a care home to be lower in social hierarchies than others in society, as being in care home could be seen as equivalent to being bereft of money, a job (i.e. economic and professional worth), health and family relationships (Yang et al., 2007). Such perceptions could feed into self-prejudice and self-discrimination on the intrapersonal level, which is a manifestation of and causative factor in depression (Cox et al., 2012).

Our study showed that participants reporting a high level of depressive symptoms concurrently reported lower perceived social support, and this association has been reported in older adults elsewhere (Lee et al. 2012). This is a particularly important factor for care home residents, most of whom report experiencing loneliness (Drageset et al., 2011). A high proportion of our sample reported low or moderate levels of social support (80.5%), especially from their families (42.9%), and this may increase their risk of experiencing depressive symptoms.

The Biopsychosocial Model proposes that in order to understand illness we need to understand how the person interrelates with the social systems of his or her world (Engel, 1980, 1989; Sarafino and Smith, 2014). Our findings align with this model, and demonstrate that depressive symptoms among Thai care home residents correlate with psychological factors (low self-esteem), social factors (low social support) and in particular, perceived high internalised stigma of living in care home. Therefore, intervention to prevent or decrease depressive symptoms in this population should take a holistic approach.

The major strength of this study was the exceptionally high response rate from the older residents, and as such, it is likely that the findings of the study may be generalised to similar populations. We did not assess cognitive function, and so cannot determine whether cognitive impairment was associated with depressive symptoms in this sample. However, residents with severe cognitive impairment were excluded from the study. The cross-sectional design of the study means that we are unable to determine whether identified issues are manifest over a longer time period, which would require longitudinal assessment.

## Conclusion

Depressive symptoms were common in older people living in care homes in Thailand. Internalised stigma of living in a care home was identified in the majority of care home residents, and was the strongest predictor of depressive symptoms. Residents who had high internalised stigma of living in a care home were over nine times more likely to report depressive symptoms than those who did not report high internalised stigma. Intervention is needed to reduce the stigma associated with living in a care home, which may decrease or help to prevent depressive symptoms in Thai care home residents. Interventions might include educational interventions in the care home setting, social activities organised by care homes engaging both residents and their families, and collaboration with the media to advocate a more positive image of care homes within Thai society.

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Participant characteristics	Low internalised	High internalised		
	stigma (n=98)	stigma (n=30)		
	n (%)	n (%)		
Age group				
60-70 years	25 (19.5)	5 (3.9)		
71-75 years	21 (16.4)	5 (3.9)		
≥76 years	52 (40.6)	20 (15.6)		
Gender				
Male	36 (28.1)	12 (9.4)		
Female	62 (48.4)	18 (14.1)		
Marital status				
Single	22 (17.2)	5 (3.9)		
Partnership	4 (3.1)	1 (0.8)		
Separated/Divorced	27 (21.1)	7 (5.5)		
Widowed	45 (35.2)	17 (13.3)		
Religion				
Buddhism	96 (75.0)	30 (23.4)		
None (Atheist)	2 (1.6)	0 (0.0)		
Highest qualification				
No qualifications	18 (14.1)	6 (4.7)		
Primary school	55 (43.0)	20 (15.6)		
Secondary school and higher	25 (19.5)	4 (3.1)		
Time spent living in a care home				
< 1 year	22 (17.2)	4 (3.1)		
1 to 5 years	39 (30.5)	13 (10.2)		
5 to 10 years	19 (14.8)	7 (5.5)		
≥10 years	18 (14.1)	6 (4.7)		

**TABLE 1**: Demographic characteristics of participants (n=128)

Participant characteristics	Low internalised	High internalised
	stigma (n=98)	stigma (n=30)
	n (%)	n (%)
Have own child or adopted child		
Νο	32 (25.0)	9 (7.0)
Yes	66 (51.6)	21 (16.4)
Frequency of visits from others		
No visitors	33 (25.8)	10 (7.8)
Monthly visit	19 (14.8)	3 (2.3)
Visit every 1-6 months	14 (10.9)	7 (5.5)
Visit very 6 months – 1 year	26 (20.3)	6 (4.7)
Over 1 year between visits	6 (4.7)	4 (3.1)
Comorbidities		
Νο	31 (24.2)	7 (5.5)
Yes	67 (52.3)	23 (18.0)
Reasons for living in a care home		
Poverty	26 (20.3)	7 (5.5)
Family conflict	28 (21.9)	7 (5.5)
Being abandoned	3 (2.3)	2 (1.6)
No family	7 (5.5)	1 (0.8)
Health issues	29 (22.7)	12 (9.4)
Loneliness	5 (3.9)	1 (0.8)

Note: Values are number and percentages in parenthesis.

Scale	15-TGDS	T-ISLCH	T-RSES	T-MSPSS	T-CSI-	Mean±SD
					SF	
15-TGDS	1.00					4.38±3.35
T-ISLCH	r=0.563	1.00				2.34±0.28
	(0.001)*					
T-RSES	r=-0.574	r=-0.721	1.00			18.83±3.28
	(0.001)*	(0.001)*				
T-MSPSS	r=-0.333	r=-0.333	r=0.331	1.00		3.87±1.19
	(0.001)*	(0.001)*	(0.001)*			
T-CSI-SF	r=0.48	r=0.091	r=0.090	r=0.288	1.00	2.43±0.56
	(0.589)	(0.307)	(0.311)	(0.001)*		

TABLE 2: Correlations between depressive symptoms and other variables (n=128)

\*: significant difference when p< 0.001. 15-TGDS: The 15-Item Thai Geriatric Depression Scale; T-ISLCH: Internalised Stigma of Living in a Care Home Scale; T-RSES: Thai Version of Rosenberg Self-Esteem Scale; T-MSPSS: Thai Version of Multidimensional Scale of Perceived Social Support; T-CSI-SF: Thai version of a Coping Strategies Inventory Short Form.

	В	S.E.	Wald	df	р	Odds	95% C.I	. for Odds
						Ratio	Ratio	
							Lower	Upper
Gender	.682	.449	2.306	1	.129	1.977	.820	4.766
Age	-	.027	1.577	1	.209	.967	.917	1.019
	.034							
Comorbidities	.229	.473	.233	1	.629	1.257	.497	3.180
Internalised stigma	2.21	.540	16.850	1	.000	9.165	3.182	26.396
	5							
Social support	-	.016	4.057	1	.044	.969	.939	.999
	.032							
Constant	2.60	2.289	1.291	1	.256	13.464		
	0							

**TABLE 3:** Logistic regression: Predictors of depressive symptoms (n=128)

Note. CI= confidence interval for odds ratio (OR)