

科技部補助專題研究計畫成果報告 期末報告

存活照護計畫於晚期口腔癌多元族群女性主要照顧者復原力之
研究-趨勢、建構介入模式與縱貫成效評值 (A09)

計畫類別：個別型計畫
計畫編號：MOST 104-2629-B-255-001-
執行期間：104年08月01日至105年09月30日
執行單位：長庚學校財團法人長庚科技大學護理系

計畫主持人：陳淑卿
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計畫參與人員：學士級-專任助理人員：潘美娟

報告附件：出席國際學術會議心得報告

中華民國 105 年 07 月 20 日

中文摘要：本研究主要目的為：探討晚期口腔癌多元族群女性主要照顧者於存活期間的復原力趨勢及其相關因素（治療結束至治療結束後六個月）（縱貫性調查）。研究採前瞻性縱貫性研究設計，共有4次收案時間點，分別為基準點：治療結束時，(T0)、治療結束後一個月(T1)、治療結束後三個月(T2)、及治療結束後六個月(T3)，主要照顧者以“復原力量表(RS)”、“照顧者負荷量表(CRA)”、“困擾溫度計(DT)”、“社會支持量表(MOS SS-m)”、“精簡版生活品質量表(MOS SF-12)”及“基本資料表”，病人以“身體活動功能量表(KPS)”、“日常生活活動量表(ADL)”、“日常生活活動量表(IADL)”及“基本資料表”為測量工具，收案地點於北部某醫學中心放射腫瘤科門診及癌症中心，針對符合收案條件之口腔癌病人及其照顧者進行方便取樣。

共收得52對病人及其家屬，研究結果顯示：照顧者復原力的變化，治療結束時(T0)最高峰，治療結束後六個月(T3)降至最低，未達統計顯著差異。(二)照顧者有輕度至中度的照顧負荷，治療結束時(T0)最高峰，逐漸下降，治療結束後六個月(T3)達到最低，且達統計顯著差異。(三)病人有好的身體活動功能、自我照顧能力、照顧者有較高的社會支持、心理層面生活品質，照顧者有較正向的復原力。

中文關鍵詞：多元族群、女性、口腔癌、存活照護計畫、復原力、照顧負荷、社會支持、生活品質。

英文摘要：The purpose of the study was to identify trajectories in resilience and related factors over 6 months in female primary caregivers of patients with advanced oral cavity cancer during the survival period (recruitment of participants and following them from initial completed treatment to 6 months after completion treatment) (longitudinal survey).

This study was a prospective longitudinal design four times of data collection time point will be arranged to collect data. Patients and caregivers were assessed at four times points: end treatment (T0), and then at 1, 3, and 6 months after completing treatment (T1, T2, and T3, respectively).

Patients were assessed using Karnofsky's Performance Status Index (KPS), Katz Activities of Daily Living Scale (ADL), Instrument Activities of Daily Living Scale (IADL), and background information form. Primary caregivers were assessed the related variables using the Resilience Scale (RS), Caregiver Reaction Assessment (CRA), Distress Thermometer (DT), Medical Outcomes Study Social Support Survey-modified (MOS SS-m), Medical Outcomes Study Short Form SF-12 (MOS SF-12), and a background information form. Study was conducted to recruited subjects from RT outpatients department and cancer center in a medical

center in northern Taiwan.

A total of fifty-two eligible subjects were recruited by convenience sampling in first year. Data was analyzed by descriptive statistics. Caregivers' resilience peaked at T0, decreased at T3, and T3 values were lower than at T0 (end treatment), with no statistically significant differences over time. Caregiving burden were in mild-to-moderate, demonstrating a decrease from T0 to T3, a peak at T0 to a low at T3 (6 months after completing treatment), and statistically significant differences among time points. Patients with good physical performance ($p = 0.011$, $p < 0.001$), self-care ability of daily life ($p = 0.024$, $p < 0.001$), caregivers perceived greater social support ($p = 0.009$, $p < 0.001$), and higher level of mental quality of life ($p = 0.019$, $p < 0.015$) were associated with positive resilience

英文關鍵詞： Multi-cultural ethnic, Female, Oral cavity cancer, Survivorship care plan, Resilience, Caregiver burden, Social support, Quality of life.

科技部專題研究計畫成果報告撰寫格式

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成果報告繳交之期限及種類（期中進度報告及期末報告），應依本部補助專題研究計畫作業要點及專題研究計畫經費核定清單之規定辦理。至報告內容之篇幅，期中進度報告以4至10頁為原則，並應忠實呈現截至繳交時之研究成果，期末報告不得少於10頁。

二、報告格式：依序為封面、目錄、中英文摘要及關鍵詞、報告內容、參考文獻、計畫成果自評、可供推廣之研發成果資料表、附錄。

(一)報告封面：請至本部網站（<https://most.gov.tw>）線上製作（格式如附件一）。

(二)中、英文摘要及關鍵詞 (keywords)。

(三)報告內容：包括前言、研究目的、文獻探討、研究方法、結果與討論（含結論與建議）等。

(四)成果自評表：請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值(簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性)、是否適合在學術期刊發表或申請專利、主要發現（簡要敘述成果是否具有政策應用參考價值及具影響公共利益之重大發現）或其他有關價值等，作一綜合評估，並請至本部網站線上製作（格式如附件二）。

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(六)附表及附圖可列在文中或參考文獻之後，各表、圖請說明內容。

(七)可供推廣之研發成果資料表：

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(十)該計畫若列屬國際合作研究，應將雙方互訪及合作研究情況、共同研究成果及是否持續雙方合作等，於報告中重點式敘明。

三、計畫中獲補助國外差旅費，出國進行國際合作與移地研究、出席國際學術會議或出國參訪及考察者，每次均須依規定分別撰寫出國心得報告（其中，出席國際學術會議者須另附發表之論文全文或摘要，但受邀專題演講或擔任會議主持人者不在此限），並至本部網站線上繳交電子檔，出國心得報告格式如附件五、六、七。

四、計畫中獲補助國外學者來臺費用，每次均須分別撰寫國外學者來臺訪問成果報告，並至本部網站線上繳交電子檔，報告格式如附件八。

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科技部補助專題研究計畫成果報告

(期中進度報告/期末報告)

(存活照護計畫於晚期口腔癌多元族群女性主要照顧者復原力之研究-趨勢、建構介入模式與縱貫成效評值 (A09))

計畫類別：個別型計畫 整合型計畫

計畫編號：MOST 104-2629-B-255-001

執行期間：104年8月1日至105年7月31日

執行機構及系所：

計畫主持人：陳淑卿

共同主持人：林青蓉、彭熙寧、林倩妤、黃炳勝

計畫參與人員：潘美娟

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執行國際合作與移地研究心得報告

出席國際學術會議心得報告

出國參訪及考察心得報告

中 華 民 國 105 年 7 月 31 日

報告內容

中文摘要

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關鍵詞：多元族群、女性、口腔癌、存活照護計畫、復原力、照顧負荷、社會支持、生活品質。

Abstract

The purpose of the study was to identify trajectories in resilience and related factors over 6 months in female primary caregivers of patients with advanced oral cavity cancer during the survival period (recruitment of participants and following them from initial completed treatment to 6 months after completion treatment) (longitudinal survey).

This study was a prospective longitudinal design four times of data collection time point will be arranged to collect data. Patients and caregivers were assessed at four times points: end treatment (T0), and then at 1, 3, and 6 months after completing treatment (T1, T2, and T3, respectively).

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Keywords: Multi-cultural ethnic, Female, Oral cavity cancer, Survivorship care plan, Resilience, Caregiver burden, Social support, Quality of life.

Background

In 2012, the incidence rate of oral cavity cancer was 300 per 1000 worldwide.¹ Oral cavity cancer is associated with a high prevalence of cancer risk factors (betel nut chewing, smoking, and drinking).²⁻³ Approximately 6300 cases of oral cavity cancer were diagnosed in Taiwan during 2010, with many patients diagnosed with Stage III or IV disease.⁴ The evidence suggests that radical excision and radiation therapy (RT) and surgery with concurrent chemoradiation therapy (CCRT) are the most important modalities for successful advanced oral cavity cancer treatment.⁵ Taiwan's national gender ratio, males are affected significantly more than females, with a ratio of from 9:1 to 9.3:1, reflects the widespread practice of betel quid chewing among males in this country.⁶⁻⁷ However, anti-cancer treatments lead to varying levels of physical and psychological disturbance during treatment and prolong to survival period. The effects can affect primary caregivers' quality of life and the impact on their resilience.⁸ Resilience can be defined as "a dynamic process encompassing positive adaptation within the context of significant adversity."^{9(p543)} Resilience encompasses a range of thoughts (e.g., positive orientation), feelings (e.g., sense of hope) and behaviours (e.g., flexibility, perseverance).⁹ Caregivers' resilience is associated with caregiver burden, social support, emotional distress, and quality of life.

Resilience assessment and survivorship care plan is a specific type of care involving caregiving hardiness that is designed to help women cope with caregiving stress and adjust positively during the survival period. Because of the stigma associated with oral cavity cancer or head and neck cancer, primary caregivers are reluctant to openly discuss their family matters with others, even with relatives. Hence, studying the impact of resilience on primary caregivers' adjustment in oral cavity cancer primary caregivers is even more significant. In Taiwan, most of primary caregivers of oral cancer patients were female (spouse). Recently, new residents moving to Taiwan have generated variations in population structure. Due to multi-cultural ethnic population variations (e.g. aborigines, new residents, southern Fukienese and Hakkanese people) and potential problems related to caregiving hardiness in the advanced oral cavity cancer, females with various levels of resilience may experience influences on their family function.

Understanding resilience issues in multi-cultural ethnic females with advanced oral cavity cancer not only can facilitate the provision of an appropriate survivorship care plan but also can help prevent impairment of coping strategies development and subsequent mental illness in such women.

Purpose

To longitudinally explore trajectories in resilience, caregiving burden, emotional distress, social support, and quality of life and significant factors affecting resilience in multi-cultural ethnic females primary caregivers of patients with advanced oral cavity cancer post-treatment.

Literature Review

Oral Cavity Cancer and Survivorship

Oral cavity cancer is a term used to describe one or more cancers of the oral cavity involving any tissues of the mucosa, muscle, nerve, teeth, bone, blood vessels and saliva gland.¹⁰ Nearly 55% of those diagnosed with oral cavity cancer are at an advanced stage and patients receive surgery followed by radiation therapy (RT) or concurrent chemotherapy and radiation therapy (CCRT).⁷

Advanced cancer stage for oral cavity cancer survivors has been identified as a significant factor that impacts on daily living or quality of life.¹⁷⁻¹⁸ These patients perceived multiple daily care needs,⁸ therefore they were dependent on their primary families for daily living care during the survival period.

Resilience in Primary Caregivers of Patients with Advanced Oral Cavity Cancer

Family resilience was defined as a family's ability to successfully cope with adverse events together that enables them to flourish with family communication, support and hardiness.²⁶⁻²⁹ The family resilience involves four dimensions: intrinsic family characteristic, responsive to stress, externally directed, and family member orientation.³⁰ Elloit et al.³¹ examined resilience in the initial year of caregiving for family member of spinal cord injury and showed that depression symptoms over time revealed 3 groups of caregivers: chronic (24%), recovery (24%) and resilient (48%). The chronic group reported more anxiety, negative affect, and ill health than the other 2 groups. The resilient group was best characterized by their enduring levels of positive affect and supportive social networks. In a qualitative study, Rosenberg et al.³² found that factors of resilience include baseline characteristics (i.e., inherent traits, prior expectations of cancer), processes that evolve over time (i.e., coping strategies, social support, provider interactions), and psychosocial outcomes (i.e., post-traumatic growth and lack of psychological distress).

This ratio is representative of the gender distribution of this type of cancer in Taiwan, in

which 90% to 93% of oral cavity cancer patients are male.⁷ Radiation therapy (RT) and concurrent chemoradiation therapy (CCRT) are recognized as the most effective treatment modality for advanced oral cavity cancer.⁷ The late effects of head and neck cancer patients may occur from several months to years after the completion of treatment. Some of the late effects may occur more than 5 years after treatment.^{16,33} In Taiwan, more than half of primary caregivers of oral cavity cancer were female.³⁴⁻³⁵ Badr et al.³⁶ study showed that patient and caregiver distress increased steadily over the course of radiotherapy, peaking at week 5; patients (82% male; 69% Stage 4) and caregivers (90% female) reported significant distress. Ugur et al.³⁷ also demonstrated that caregivers encounter in the home care of patients included 54.0% of caregivers helped with patient's nutrition, 50.4% with medicine use, 26.3% with oral hygiene, 26.3% with meeting urinary needs and 51.8% with changing clothes. In addition, 69.3% of caregivers helped to change bed sheets, 38.7% assisted patients to communicate with their environment and 71.5% to bring the patient to hospital or outside. The distressing symptom may continue lasting to survival period. Female primary caregivers required assistance with multiple tasks and undertake heavy responsibilities for patient care tasks during this period.

Resilience of primary family caregivers of cancer patients is associated with several characteristics. Patients' disease-related factors among patients are significant predictors of primary caregivers' resilience. Patients with less performance status and shorter time since completion of treatment were significantly depend on family caregiver assistance with activities of daily living, illness management, and family responsibilities.³⁴ Factors that contribute to resilience of primary caregivers have been examined in several studies. Previous studies have revealed an association between caregiving burden and difficult situation, impact on family recover from stressful life event and resilience.^{27, 38} Primary caregivers' resilience is associated with social support. Social support refers to a network of family, friends, neighbors, and community members that is available in times of need to provide psychological, physical, and financial help.³⁹ Social support is a significant factor for caregivers of patients with oral cancer,³⁴ and has been shown to act as a buffer against negative effects on caregiver caregiving.^{38, 40} Previous study has found that caregivers' higher resilience relates to a good emotional and physical status in caregivers.⁴¹ Moreover, resilience is more associated with caregiver variables (e.g. problem-solving skill, age, socioeconomic status, and spirituality).³⁸ Previous research has demonstrated that trait resilience has positive effect on all aspect of quality of life.⁴² Thus, patients' time since completion of treatment, performance status, family caregivers' age, socioeconomic status, spirituality, caregiving burden, emotional distress,

social support, and quality of life may be factors in the primary caregiver resilience in the context of patients with advanced oral cavity cancer.

Methods

Design

A longitudinal prospective study design will be used to examine the trajectories and predictors of resilience in multi-cultural ethnic female primary caregivers of patients with advanced oral cavity cancer.

Inclusion criteria

1. Patients' pathologic confirmation of oral cavity squamous cell carcinoma (OSCC);
2. New diagnosis of oral cavity cancer with cancer stage on III and IV, and received surgery and RT or CCRT and initial completion of treatment to 6 months after completion treatment;
3. Disease free survivors; patients who did not show apparent signs of cancer;
4. Female gender of primary caregivers and age greater than 20 years and less than 70 years;
5. Female of primary caregivers had to be providing uncompensated care or assistance to a patient and be identified by a patient as a primary family caregiver;
6. Agreement to participate in the study after explanation of its purposes and procedures.

Instrument

Primary caregivers:

1. Resilience Scale (RS)⁵²
2. Caregiver Reaction Assessment (CRA).⁵⁶
3. Distress Thermometer (DT)⁶⁰
4. Medical Outcomes Study Social Support Survey-modified (MOS SS-m)⁶⁴
5. Medical Outcomes Study Short Form SF-12 (MOS SF-12)⁶⁷⁻⁶⁹
6. Demographic and care characteristics

Patients:

1. Karnofsky's Performance Status Index (KPS)⁷⁰
2. Katz Activities of Daily Living Scale (ADL)⁷⁶
3. Instrument Activities of Daily Living Scale (IADL)⁷⁷
4. Background information form

Results

Demographic and Clinical Characteristics of Patients

A total of 54 patient-caregiver pairs completed four assessments in the study. The average age of the patients was 52.58 ± 8.43 years, and most patients were male (94.3%). More than half of patients were unemployed (66.0%). A majority of the patients were married (75.0%), had junior (34.6%) and senior (32.7%) education levels, and Buddhism or Taoism religion (90.4%). A majority of the patients stage IV disease (76.9%) at diagnosis and the most common sites of cancer were the buccal mucosa (32.7%) and tongue (42.3%). Almost two-third of the patients received surgery combine CCRT (84.6%). The average radiation dose was 6580.7 (SD=331.9). Patients completed treatment were average 4.6 (SD=2.9) months. A large majority of subjects had a good ability of daily living (average ADL=99.2, average IADL=23.0). (Table 1).

Demographic and care characteristics of caregivers

Most caregivers were women (90.4%; mean age, 44.5 years), were unemployed (50.0%), had graduated from senior high school (42.3%), and were religious (82.7%). More than 90% were caring for partners living in the same house. More than one-third did not share caregiving with other family members, and more than half without previous care experiences (57.77%). The average caregiving time for each day was 5.48 hour (SD=3.9) (Table 2).

Changes of Resilience, Caregiving Burden, Social Support, Distress, and Quality of Life

Caregivers' resilience peaked at T3, decreased at T3, and T3 values were lower than at T0 (end treatment), with no statistically significant differences over time. Caregiving burden were in mild-to-moderate, demonstrating a decrease from T0 to T3, a peak at T0 to a low at T3 (6 months after completing treatment), and statistically significant differences among time points. Caregivers' distress followed a similar pattern, with the peak distress at T0, much improvement noted at T1 and T2, with no statistically significant differences over time. Physical and mental quality of life increased from T0 to T3, a peak at T3, with no statistically significant differences over time (Table 3).

Factors related to the caregivers' resilience

In the GEE analysis, we explored the predictive factors related to changes in caregivers' resilience across the first 6 months after completing treatment, including patients' physical performance, patients' ADL, caregivers; social support, and caregivers' mental quality of life. The results indicated that patients with good physical performance ($\beta= 0.011$, $p <$

0.001), self-care ability of daily life ($\beta= 0.024$, $p < 0.001$), caregivers perceived greater social support ($\beta= 0.009$, $p < 0.001$), and higher level of mental quality of life ($\beta= 0.019$, $p < 0.015$) were associated with positive resilience (Table 4).

Table 1 Demographic and Clinical Data (N=52)

Variable	Number (%)	Mean (SD)
Age		52.58(8.43)
Gender		
Female	3(5.8)	
Male	49(94.3)	
Occupation		
Unemployed	35(66.0)	
Employed	18(34.0)	
Marital status		
Unmarried	13(25.0)	
Married	39(75.0)	
Educational level		
None	1(1.9)	
Elementary	10(19.2)	
Junior high	18(34.6)	
Senior high	17(32.7)	
College and above	6(11.5)	
Religion		
None	4(7.7)	
Buddhism/Taoism	47(90.4)	
Christianity	1(1.9)	
Sub-site		
Lip	0(0)	
Buccal mucosa	17(32.7)	
Oral tongue	22(42.3)	
Gingivae	4(7.7)	
Mouth floor	2(3.8)	
Hard plate	2(3.8)	
Mouth floor	2(3.8)	
Retromolar	5(9.6)	
Cancer stage		
II	5(9.6)	
III	7(13.5)	
IV	40(76.9)	
Type of treatment		
- Surgery + RT	7(13.5)	
- Surgery + CT	1(1.9)	
- Surgery + CCRT	44(84.6)	
Performance status (level)		
80	2(3.8)	
90	13(25.0)	
100	37(71.2)	

Radiotherapy (total dose, cGy)	6580.7(331.9)
Time since the completion of treatment (month)	4.6(2.9)
ADL	99.2(2.7)
IADL	23.0(1.7)

Table 2. Demographic and care characteristics of caregivers (N=52)

Variable	Number (%)	Mean (SD)
Age		44.50(10.99)
Gender		
Male	5(9.6)	
Female	47(90.4)	
Occupation		
Unemployed	26(50.0)	
Part-time employed	5(9.6)	
Full-time employed	21(40.4)	
Educational level		
illiteracy	1(1.9)	
Elementary	11(21.2)	
Junior high	14(26.9)	
Senior high	22(42.3)	
College and above	4(7.7)	
Religion		
None	9(17.3)	
Buddhism/Taoism	42(80.8)	
Christianity	1(1.9)	
Relationship to patient (spouse)		
No	17(32.7)	
Yes	35(67.3)	
Live with patient		
No	3(5.8)	
Yes	49(94.2)	
Rotation with other family members		
No	22(42.3)	
Yes	30(57.7)	
Previous care experiences		
No	30(57.7)	
Yes	22(42.3)	
Caregiving time for each day (hour)	5.48(3.9)	

Table 3. Changes of Resilience, Caregiving Burden, Social Support, Distress, and Quality of Life (N=51)

Variable	T0 ^a	T1 (1 M)	T2 (3M)	T3 (6M)	Within subject effect
	\bar{X} (SD)	\bar{X} (SD)	\bar{X} (SD)	\bar{X} (SD)	
Resilience (RS) ^b	4.74(0.49)	4.75(0.51)	4.78(0.58)	4.71(0.43)	$F_{(3, 49.000)}=0.775, p>0.05$
Caregiving Burden(CRA) ^c	3.12(0.31)	3.07(0.28)	3.05(0.32)	3.00(0.26)	$F_{(3, 49.000)}=7.903, p<0.001$ T0>T1, T2, T3
Social Support (MOS) ^d	66.17(16.01)	64.98(17.15)	65.06(16.15)	65.76(15.12)	$F_{(3, 49.000)}=0.588, p>0.05$
Distress(DT) ^e	3.06(2.78)	2.73(2.34)	2.81(2.13)	2.85(2.10)	$F_{(3, 49.000)}=0.481, p>0.05$
Physical-QOL ^f	48.31(7.43)	49.79(7.15)	49.84(5.93)	50.09(5.02)	$F_{(3, 49.000)}=1.602, p>0.05$
Mental-QOL ^f	46.15(11.47)	45.93(10.90)	46.73(9.78)	47.70(9.82)	$F_{(3, 49.000)}=0.413, p>0.05$

^a Patients were followed from end-treatment through the first six months of completing treatment (end-treatment, 1, 3, and 6 month from completing treatment), T0=end treatment; T1=1-month after completing treatment; T2=3-month after completing treatment; T3=6-month after completing treatment; reference group was T0.

^b RS = Resilience Scale.

^c CRA = Caregiving Reaction Scale.

^d MOS = Medical Social Support.

^e DT = Distress Thermometer

^f Physical-QOL, Mental-QOL = Medical Outcomes Study Short Form SF-12.

Table 3. The GEE ^a for predicting the caregivers' resilience (N=51)

Variable	Coefficient.	Std. Err.	Wald chi-square	p	[95% Conf.	Interval]
Patients' physical performance	0.011	0.0051	4.885	0.027	0.001	0.021
Patients' ADL	0.024	0.0083	8.669	0.003	0.008	0.041
Patients' IADL	- 0.024	0.0212	1.332	0.248	- 0.066	0.017
Caregivers' caregiving burden	0.228	0.1888	1.461	0.227	- 4.920	3.150
Caregivers' social support	0.009	0.0040	4.900	0.027	0.001	0.017
Caregivers' distress	0.010	0.0208	0.863	0.353	- 0.058	0.021
Caregivers' physical-QOL	0.012	0.0075	2.746	0.098	- 0.002	0.027
Caregivers' mental-QOL	0.019	0.0058	10.129	0.001	0.007	0.030
Time	- 0.007	0.0227	0.107	0.743	- 0.052	0.037
Intercept	- 0.885	2.0586	0.185	0.667	- 4.920	3.150

^aGEE, generalized estimating equation, was based on unstructured working correlation matrix.

^bKPS = Karnofsky Performance Status.

^cSSS = Symptom Severity Scale.

^dHADS-A = Hospital Anxiety and Depression Scale (HADS)-anxiety subscale.

^eHADS-D = Hospital Anxiety and Depression Scale (HADS)-depression subscale.

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科技部補助專題研究計畫成果自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現（簡要敘述成果是否具有政策應用參考價值及具影響公共利益之重大發現）或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以 100 字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形(請於其他欄註明專利及技轉之證號、合約、申請及洽談等詳細資訊)

論文：已發表未發表之文稿 撰寫中 無

專利：已獲得申請中 無

技轉：已技轉洽談中

無

其他：(以 200 字為限)

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性，以 500 字為限）。

本年度縱貫性研究計畫發現口腔癌照顧者在治療結束後初期需要較高的照護相關協助，復原力的重要因子，因此，根據此階段的發現，研究人員將設計系列性居家照護訓練方案，以提升照顧者復原力。

4. 主要發現

本研究具有政策應用參考價值：否 是，建議提供機關_____

(勾選「是」者，請列舉建議可提供施政參考之業務主管機關)

本研究具影響公共利益之重大發現：否 是

說明：(以 150 字為限)

科技部補助專題研究計畫成果彙整表

計畫主持人：陳淑卿		計畫編號：MOST 104-2629-B-255-001					
計畫名稱：存活照護計畫於晚期口腔癌多元族群女性主要照顧者復原力之研究-趨勢、建構介入模式與縱貫成效評值 (A09)							
成果項目			量化	單位	質化 (說明：各成果項目請附佐證資料或細項說明，如期刊名稱、年份、卷期、起訖頁數、證號...等)		
國內	學術性論文	期刊論文		5	篇	請附期刊資訊。	
		研討會論文		9			
		專書			本	請附專書資訊。	
		專書論文			章	請附專書論文資訊。	
		技術報告			篇		
		其他			篇		
	智慧財產權及成果	專利權	發明專利	申請中	件	請附佐證資料，如申請案號。	
				已獲得		請附佐證資料，如獲證案號。	
			新型/設計專利				
		商標權					
		營業秘密					
		積體電路電路布局權					
		著作權					
		品種權					
		其他					
	技術移轉	件數			件		
		收入			千元	1. 依「科技部科學技術研究發展成果歸屬及運用辦法」第2條規定，研發成果收入係指執行研究發展之單位因管理及運用研發成果所獲得之授權金、權利金、價金、股權或其他權益。 2. 請註明合約金額。	
	國外	學術性論文	期刊論文		26	篇	請附期刊資訊。
			研討會論文		5		
			專書			本	請附專書資訊。
專書論文				章	請附專書論文資訊。		
技術報告				篇			
其他				篇			

	智慧財產權 及成果	專利權	發明專利	申請中		件	請附佐證資料，如申請案號。
				已獲得			請附佐證資料，如獲證案號。
			新型/設計專利				
		商標權					
		營業秘密					
		積體電路電路布局權					
		著作權					
		品種權					
	其他						
	技術移轉	件數					件
收入				千元	<ol style="list-style-type: none"> 依「科技部科學技術研究發展成果歸屬及運用辦法」第2條規定，研發成果收入係指執行研究發展之單位因管理及運用研發成果所獲得之授權金、權利金、價金、股權或其他權益。 請註明合約金額。 		
參與計畫人力	本國籍	大專生			人次		
		碩士生					
		博士生					
		博士後研究員					
		專任助理		1			
	非本國籍	大專生					
		碩士生					
		博士生					
		博士後研究員					
		專任助理					
其他成果 (無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。)							

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1. **Chen, S.C.**, Chiou, S. C., Yu, C. J., Lee, Y. H., Liao, W. Y., Hsieh, P. Y., Jhang, S. Y., & Lai, Y. H.* (2016). The unmet supportive care needs – what advanced lung cancer patients’ caregivers need and related factors. *Supportive Care in Cancer*, 24(7), 2999-3009. doi: 10.1007/s00520-016-3096-3
2. Chen, Y.J., **Chen, S.C.***, Wang, C. P., Fang, Y. Y., Lee, Y. H., Lou, P. J., Ko, J. Y., Chiang, C. C., & Lai, Y.H.* (2014). Trismus, xerostomia and nutrition status in nasopharyngeal carcinoma survivors treated with radiation. *European Journal of Cancer Care*, 25(3), 440-448. doi: 10.1111/ecc.12270
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REVIEW ARTICLE

1. 鍾旻珊、黃琪津、葉淑玲、林月娥、賀倫惠、陳淑卿* (2016) · 肺部復健運動介入對使用呼吸器重症病患之成效－系統性文獻回顧 · *護理雜誌*，63(3)，94-104。(通訊作者)
2. 邱慧娟、邱素娥、林秀珍、陳麗琴、陳淑卿* (2015) · 衛生教育對提昇民眾大腸直腸癌篩檢意圖成效之文獻回顧 · *腫瘤護理雜誌*，14(增訂刊)，31-45。doi: 10.3966/168395442015121503004 (通訊作者)
3. 陳彥汝、陳淑卿、賴裕和、李芸湘* (2015) · 應用自我調節模式於癌症病人害怕復發之處置，*台灣醫學*，19(1)，91-98。doi: 10.6320/FJM.2015.19(1).13
4. 陳彥汝、賴裕和、陳淑卿* (2014) · 頭頸癌存活性身體心像改變及其對工作狀態的衝擊，*腫瘤護理雜誌*，14(1)，1-11。doi: 10.3966/16839544201406140100 (通訊作者)
5. 林秀英、李麗雲、陳淑卿* (2013) · 以系統性回顧電話諮詢介入對癌症篩檢之成效 · *腫瘤護理雜誌*，13(2)，39-49。(通訊作者)

(B)、研討會論文

1. **Chen, S. C.** (2016, April). Effect of skin camouflage on disfigurement and social function among women with head and neck cancer. The Annual Research Conference of the Department of Life Science of Ministry of Science and Technology, National Kaohsiung Normal University, Taipei, Taiwan, 22 April., 2016.
2. **Chen, S. C.** (2016, March). Determinants of Perceived Body Image and Discordance with Observed Disfigurement in Female Patients with Head and Neck Cancer. The Asian Conference on Psychology & the Behavioral Sciences (ACP2016), Art Center of Kobe, Kobe, Japan, 31 March-3 April, 2016.
3. **Chen, S. C.** (2015, November). Unmet information needs and clinical characteristics in patients with precancerous oral lesions. The 2nd Asian Oncology Nursing Society Conference, Seoul, Korea, 19-21 Nov., 2015.
4. **Chen, S. C.** (2015, April). Effect of skin camouflage on disfigurement and social function among

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 6. **Chen, S. C.** (2014, September). Changes and predictors of radiation-induced mucositis in patients with oral cavity cancer during active treatment. Asian-Pacific Nursing Research Conference, Taipei, Taiwan, 11-13 September, 2014.
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科技部補助專題研究計畫出席國際學術會議心得報告

日期：105 年 7 月 31 日

計畫編號	MOST 104—2629—B—255—001		
計畫名稱	存活照護計畫於晚期口腔癌多元族群女性主要照顧者復原力之研究-趨勢、建構介入模式與縱貫成效評值 (A09)		
出國人員姓名	陳淑卿	服務機構及職稱	長庚科技大學護理系(所)/教授
會議時間	105 年 3 月 31 日至 105 年 4 月 3 日	會議地點	日本神戶
會議名稱	(中文)亞洲心理與行為科學研討會 (英文) The Asian Conference on Psychology & the Behavioral Sciences (ACP2016)		
發表題目	(中文)女性病人頭頸癌自覺身體心像與醫療人員評估外觀毀損之差異 (英文) Determinants of Perceived Body Image and Discordance with Observed Disfigurement in Female Patients with Head and Neck Cancer		

一、參加會議經過

本會議每年舉行一次，該次會議主要來自全世界超過 250 位跨領域學者專家，包括：衛生政策、教育專家、社會工作師、醫療照護專家等分享不同領域的心理與行為科學研究，其中醫療專業照護領域包含日本自殺現況與防治，慢性病問題與照護議題，能藉此機會有機會與其他國家籍不同專業領域的專家交流與認識，並將此次學習經驗帶回台灣癌症護理臨床照護與未來研究規劃，期望爾後台灣每屆會議均能有代表參加，2017 年預定在日本神戶舉行，期望能有機會與專家學者進行交流。

二、與會心得

1. 美國、英國、日本等國家移民人口自殺現況分析，日本較美國及英國低。
2. 日本的自殺防治方案，結合社區資源，透過社區活動鼓勵民眾參與，強化支持系統。

三、發表論文全文或摘要

Determinants of perceived body image and discordance with observed disfigurement in female patients with head and neck cancer

The purpose of this study was to compare the determinants of perceived body image and the discordance with observed disfigurement for female patients with head and neck cancer (HNC). A descriptive comparative study recruited 105 females with HNC at a medical center. Measures of facial disfigurement and body image, as well as demographic and clinical characteristics, were collected. Multivariate multiple linear modelling was used to identify the determinants of perceived body image of facial disfigurement and discordance with observed disfigurement for female HNC patients. Observed facial disfigurement was positively associated with self-perceived body image. Medical treatment, cancer stage, radiation dose, and cancer site were significantly associated with facial disfigurement. Medical treatment and work status were important predictors of perceived body image. These findings indicate a moderate prevalence of facial disfigurement among female with HNCs. Female with more facial disfigurement were more likely to have dissatisfaction with their body image. Nursing professionals need to carefully assess the appearance of females with HNCs. Camouflage interventions can be administered to help these females appropriately cope with the disfigurement and to achieve satisfaction with their body image.

Keywords: head neck cancer; disfigurement; body image; discordance; female

四、建議

無

五、攜回資料名稱及內容

研討會手冊及論文相關手冊

六、其他

無

科技部補助專題研究計畫出席國際學術會議心得報告

日期：105 年 7 月 31 日

計畫編號	MOST 104—2629—B—255—001		
計畫名稱	存活照護計畫於晚期口腔癌多元族群女性主要照顧者復原力之研究-趨勢、建構介入模式與縱貫成效評值 (A09)		
出國人員姓名	陳淑卿	服務機構及職稱	長庚科技大學護理系(所)/教授
會議時間	104 年 11 月 19 日至 104 年 11 月 21 日	會議地點	Seoul St. Mary's Hospital, The Catholic University of Korea, Korea
會議名稱	(中文)第二屆亞太腫瘤護理學會研討會 (英文) The 2nd Asian Oncology Nursing Conference		
發表題目	(中文)口腔癌前病變病人未滿足的照護需求與臨床特質 (英文)Unmet Information Needs and Clinical Characteristics in Patients with Precancerous Oral Lesions		

一、參加會議經過

本會議每二年舉行一次，該次會議主要來自亞洲地區的國家腫瘤照護專家學者，由泰國、韓國、日本、台灣等國家腫瘤護理學會理事長分享其腫瘤護理的現況與照護合作模式，台灣此次共有 47 位與會多來自台灣各大醫療院所的臨床照護專家與會並發表論文，照護主題涵蓋癌症照護及臨床其他科別，能藉此機會有機會與其他國家籍不同專業領域的專家交流與認識，並將此次學習經驗帶回台灣癌症護理臨床照護與未來研究規劃，期望爾後台灣每屆會議均能有代表參加，2017 年預定在中國北京舉行，期望能有機會與專家學者進行交流。

二、與會心得

1. 泰國、韓國、日本、台灣等國家腫瘤保險給付的現況及差異。
2. 從不同場次的專業研討會中學習在不同研究模式中建構實證腫瘤護理照護與措施的方法，如：癌症病人生活品質量表選擇及評估、疾病因應與支持性方案對子宮頸抹片篩檢陽性婦女之成效等。

3. 澳洲昆士蘭科技大學 Patsy Yates 分享存活期照護概念及照護模式。

三、發表論文全文或摘要

Unmet Information Needs and Clinical Characteristics in Patients with Precancerous Oral Lesions

Introduction: Negative attitudes and limited knowledge toward cancer screening may be important factors in explaining low rates of cancer screening and poor follow-up treatment.

Objectives: The purpose of this study was to investigate predictors of the unmet information needs of patients with precancerous oral lesions.

Methods: For this cross-sectional descriptive study, we recruited patients with precancerous oral lesions from the otolaryngology outpatient department of a single medical center in central Taiwan. Patients were assessed using a set of structure questionnaires to measure patients' state anxiety levels, attitudes towards cancer prevention, and need for information. Patients' anxiety and attitudes towards cancer prevention were evaluated based on unmet needs and associated factors were determined.

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Conclusions: Health education and individual counseling should be provided to satisfy the information needs of this population.

Keywords: cancer; precancerous oral lesions; oral mucosal screening; unmet information needs

四、建議

無

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研討會手冊及論文相關手冊

六、其他

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科技部補助專題研究計畫出席國際學術會議心得報告

日期：105 年 7 月 31 日

計畫編號	MOST 104—2629—B—255—001		
計畫名稱	存活照護計畫於晚期口腔癌多元族群女性主要照顧者復原力之研究-趨勢、建構介入模式與縱貫成效評值 (A09)		
出國人員姓名	陳淑卿	服務機構及職稱	長庚科技大學護理系(所)/教授
會議時間	105 年 3 月 31 日 至 105 年 4 月 3 日	會議地點	日本神戶
會議名稱	(中文)亞洲心理與行為科學研討會 (英文) The Asian Conference on Psychology & the Behavioral Sciences (ACP2016)		
發表題目	(中文)女性病人頭頸癌自覺身體心像與醫療人員評估外觀毀損之差異 (英文) Determinants of Perceived Body Image and Discordance with Observed Disfigurement in Female Patients with Head and Neck Cancer		

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1. 美國、英國、日本等國家移民人口自殺現況分析，日本較美國及英國低。
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Keywords: head neck cancer; disfigurement; body image; discordance; female

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Introduction: Negative attitudes and limited knowledge toward cancer screening may be important factors in explaining low rates of cancer screening and poor follow-up treatment.

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Methods: For this cross-sectional descriptive study, we recruited patients with precancerous oral lesions from the otolaryngology outpatient department of a single medical center in central Taiwan. Patients were assessed using a set of structure questionnaires to measure patients' state anxiety levels, attitudes towards cancer prevention, and need for information. Patients' anxiety and attitudes towards cancer prevention were evaluated based on unmet needs and associated factors were determined.

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科技部補助計畫衍生研發成果推廣資料表

日期:2016/07/20

科技部補助計畫	計畫名稱: 存活照護計畫於晚期口腔癌多元族群女性主要照顧者復原力之研究-趨勢、建構介入模式與縱貫成效評值 (A09)
	計畫主持人: 陳淑卿
	計畫編號: 104-2629-B-255-001- 學門領域: 性別主流科技計畫
無研發成果推廣資料	

104年度專題研究計畫成果彙整表

計畫主持人：陳淑卿			計畫編號：104-2629-B-255-001-				
計畫名稱：存活照護計畫於晚期口腔癌多元族群女性主要照顧者復原力之研究-趨勢、建構介入模式與縱貫成效評值 (A09)							
成果項目			量化	單位	質化 (說明：各成果項目請附佐證資料或細項說明，如期刊名稱、年份、卷期、起訖頁數、證號...等)		
國內	學術性論文	期刊論文		5	篇		
		研討會論文		9			
		專書		0	本		
		專書論文		0	章		
		技術報告		0	篇		
		其他		0	篇		
	智慧財產權及成果	專利權	發明專利	申請中	0	件	
				已獲得	0		
			新型/設計專利		0		
		商標權		0			
		營業秘密		0			
		積體電路電路布局權		0			
		著作權		0			
		品種權		0			
		其他		0			
	技術移轉	件數		0	件		
		收入		0	千元		
	國外	學術性論文	期刊論文		26	篇	
			研討會論文		5		
專書			0	本			
專書論文			0	章			
技術報告			0	篇			
其他			0	篇			
智慧財產權及成果		專利權	發明專利	申請中	0	件	
				已獲得	0		
			新型/設計專利		0		
		商標權		0			
		營業秘密		0			
		積體電路電路布局權		0			
		著作權		0			
		品種權		0			

		其他	0		
	技術移轉	件數	0	件	
		收入	0	千元	
參與計畫人力	本國籍	大專生	0	人次	
		碩士生	0		
		博士生	0		
		博士後研究員	0		
		專任助理	1		
	非本國籍	大專生	0		
		碩士生	0		
		博士生	0		
		博士後研究員	0		
		專任助理	0		
其他成果 (無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。)					

科技部補助專題研究計畫成果自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現（簡要敘述成果是否具有政策應用參考價值及具影響公共利益之重大發現）或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以100字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形（請於其他欄註明專利及技轉之證號、合約、申請及洽談等詳細資訊）

論文： 已發表 未發表之文稿 撰寫中 無

專利： 已獲得 申請中 無

技轉： 已技轉 洽談中 無

其他：（以200字為限）

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性，以500字為限）

本年度縱貫性研究計畫發現口腔癌照顧者在治療結束後初期需要較高的照護相關協助，復原力的重要因子，因此，根據此階段的發現，研究人員將設計系列性居家照護訓練方案，以提升照顧者復原力。

4. 主要發現

本研究具有政策應用參考價值： 否 是，建議提供機關

（勾選「是」者，請列舉建議可提供施政參考之業務主管機關）

本研究具影響公共利益之重大發現： 否 是

說明：（以150字為限）

無