



Effectiveness of telephone consultation in Northern Taiwan Daycare center in Response to COVID-19 epidemic prevention

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Backgrounds

The coronavirus disease 2019 (COVID-19) outbreak is a major healthcare threat in global. The COVID-19 epidemic caused the Daycare Center temporarily be closed until further notice, and the dementia cases were become more degraded at home and cases the heavy load of the main caregivers. Our unit is the Daycare Center for Dementia in Northern Taiwan. In 2022, there have a total of 30 cases of dementia elders, with an average age of 82.7 years and MMSE score of 20.5; 84% of the main caregivers are family members, and the Kingston Caregiver Stress Scale (KCSS) is used for caregivers Stress was assessed using the Likert Scale: 1 for no stress to 5 for extreme stress. The higher score, the greater pressure. The total average is 3.2, which belongs to moderate care stress.

Objective

This study arm to understand whether the use of telephone consultation to provide various solutions to daily life and video conference guidance on rehabilitation activities at home during the epidemic can reduce the stress of caregivers and delay the disability of dementia.

Methods

The actual steps of our project are as following below in May-July 2022.

- First, pre-preparation of information software, video equipment: mobile phone, computer, etc., communication software: line, skype, messenger and other communication software architecture and operation test.
- Second, each staff member needs to receive 4 hour of education and training on the video visits process and software operation skills. The technical operation skills required to reach full score.
- The full-time nurses in the center conducted a telephone consultation for 30 minutes twice a week for 8 weeks and then the caregiver stress assessment and dementia cases ADL scores will be conducted.

Kingston Caregiver Stress Scale (KCSS) Providence Care

Patient Name: _____ Case #: _____

Caregiver: _____ Relation to Patient: _____ Date: _____

Lives in: Community _____ Long Term Care Facility _____ Other _____

Some people report feelings of stress surrounding certain aspects of care giving. To what extent, if any, do these apply to you in your role of care giving to your spouse or relative? Using a 5 point rating scale, where 1 equals no stress and 5 equals extreme stress, indicate the extent of the stress or frustration you feel surrounding the following issues.

1	2	3	4	5
Feeling NO Stress (Coping fine, no problems)	Some Stress	Moderate Stress	A lot of Stress	Extreme Stress (Feeling at "end of rope", health at risk)
CARE GIVING ISSUES				
1	2	3	4	5
TO WHAT EXTENT... Are you having feelings of being overwhelmed, over worked, and/or over burdened?				
2	3	4	5	
Has there been a change in your relationship with your spouse/relative?				
3	4	5		
Have you noticed any changes in your social life?				
4	5			
Are you having any conflicts with your previous daily commitments (work/volunteering)?				
5				
Do you have feelings of being confined or trapped by the responsibilities or demands of care giving?				
6				
Do you ever have feelings related to a lack of confidence in your ability to provide care?				
7				
Do you have concerns regarding the future care needs of your spouse/relative?				
FAMILY ISSUES				
8	9	10		
TO WHAT EXTENT... Are you having any conflicts within your family over care decisions?				
9	10			
Are you having any conflicts within your family over the amount of support you are receiving in providing care?				
10				
FINANCIAL ISSUES				
TO WHAT EXTENT... Are you having any financial difficulties associated with care giving?				

This form should be used in conjunction with the KCSS Administration and Interpretation Manual which can be freely downloaded from www.kingstonscales.ca or email: kcscales@queensu.ca

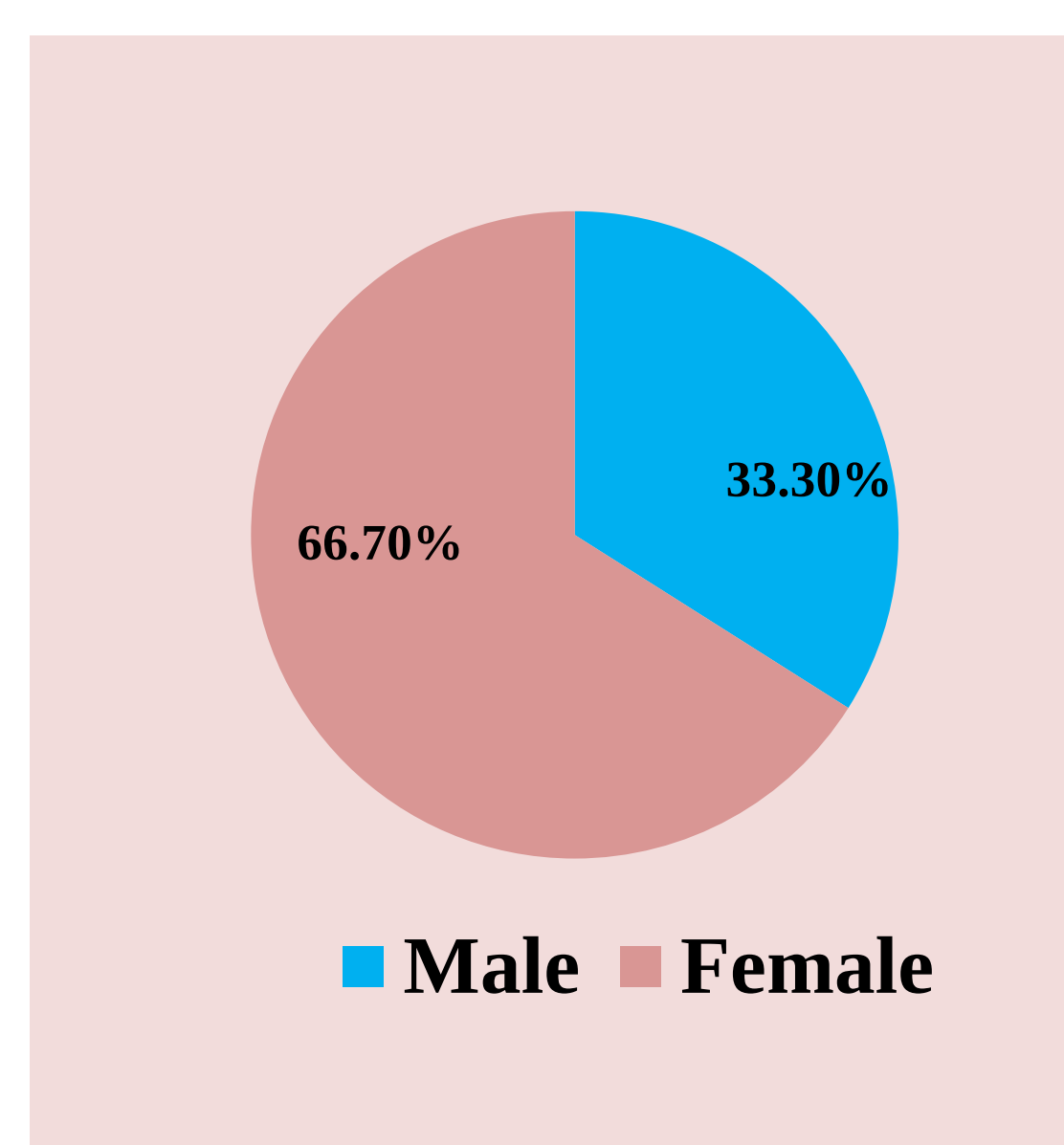
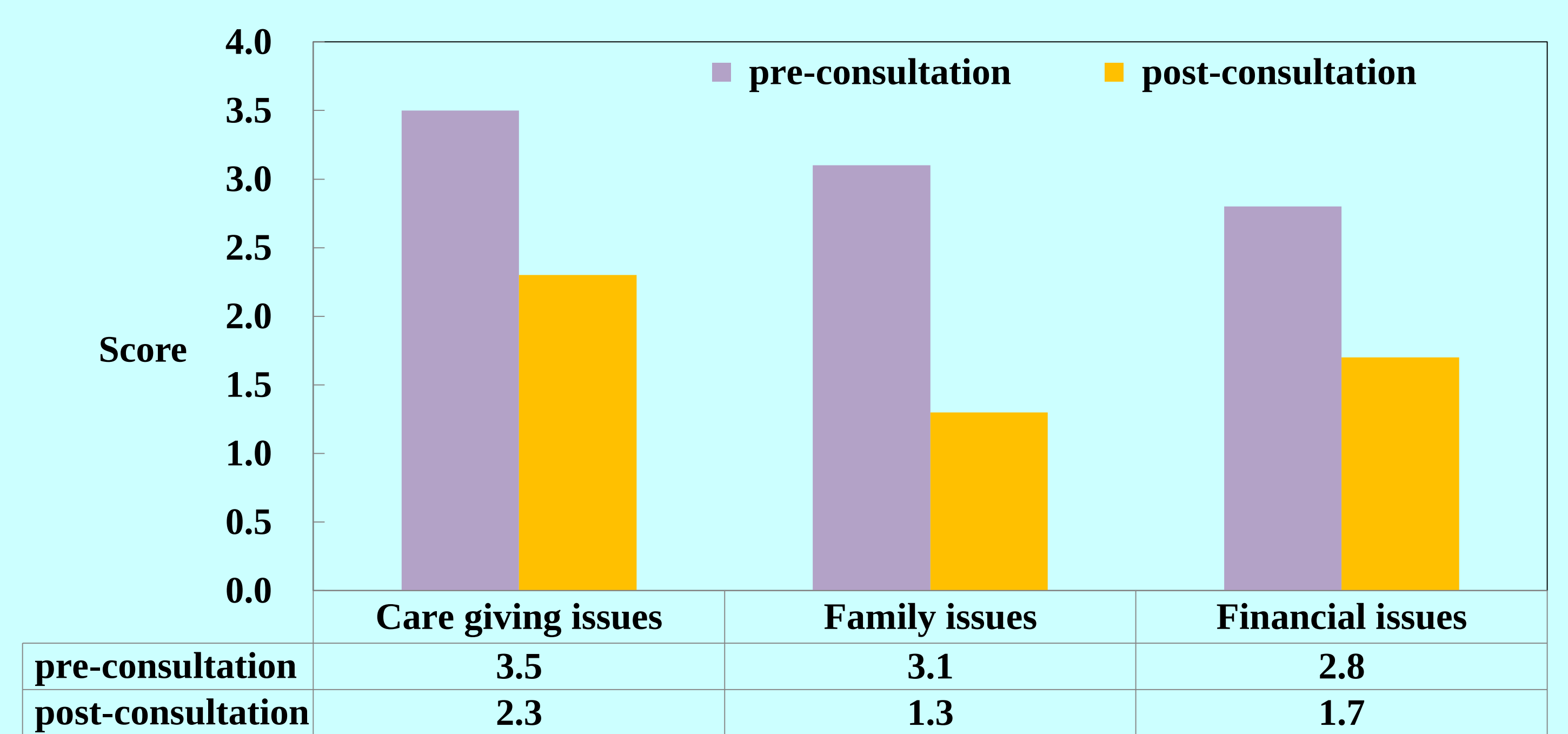
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Reference

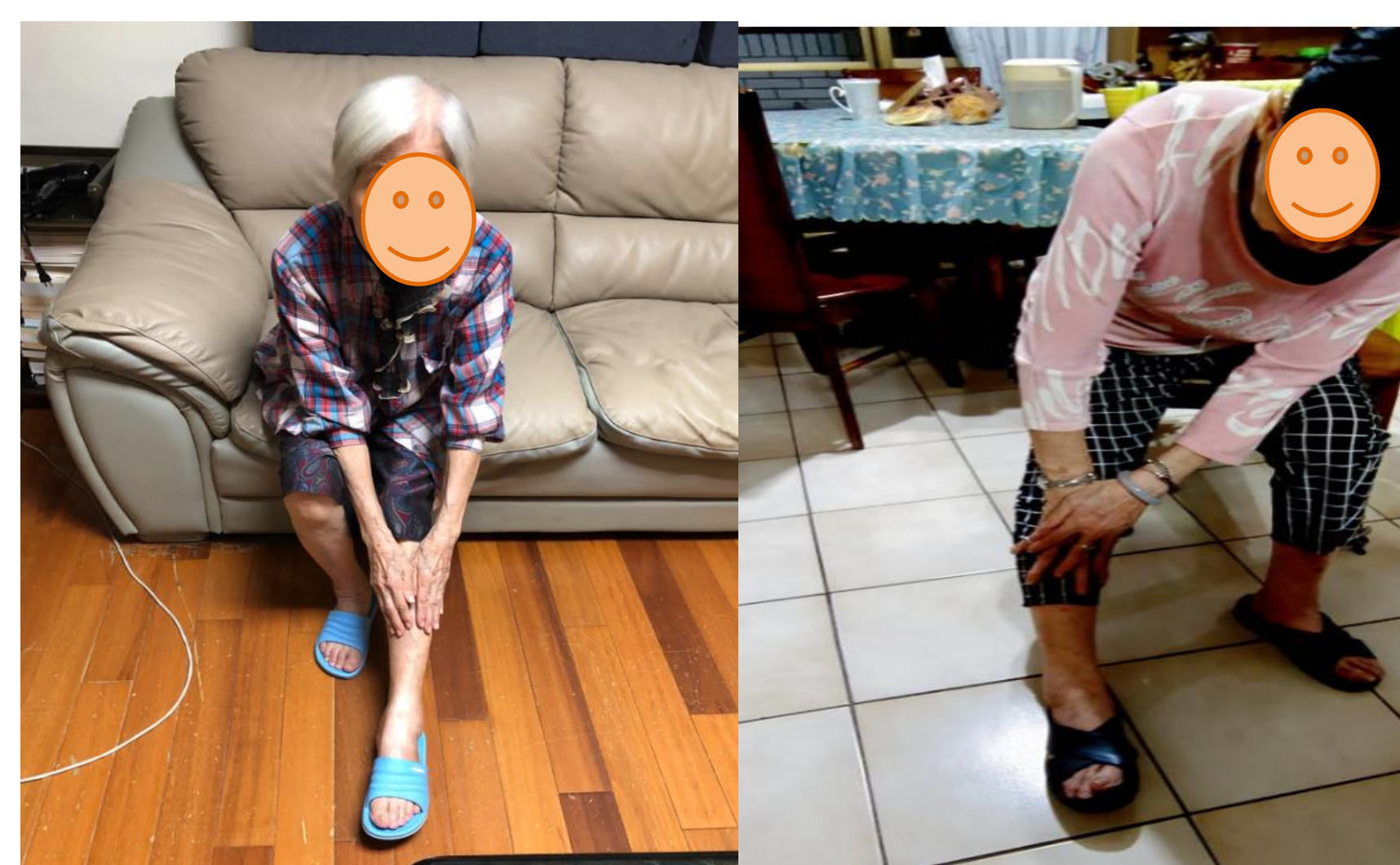
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Results

- The average age of caregivers receiving telephone counseling is 60.6 years old. The main caregivers 41.7% are spouses and 58.3% are sons and daughters; 33.3% are male and 66.7% are female.
- After 8 weeks of telephone counseling, the pre-consultation KCSS score was 3.1 points, and the post-consultation KCSS was decrease to 1.7 points ($p = 0.001$), have shown a statistically significant difference. And main caregivers conscious care ability can be strengthened (95% CI -1.09 to -0.08).
- The average satisfaction of caregivers is 95.7% and we found that the case's ADL average score increased from 73.2 ± 8.6 to 75.9 ± 10.4 points.



Item	Before	After	P Value
ADL average score	73.2±8.6	75.9±10.4	0.04
IADL average score	6.1±3.2	9.5±2.6	0.01



Elders with dementia exercise at home through telephone consultation

Conclusions

According to the results show that the telephone consultation services of the daycare center during epidemic prevention which can improve the effectiveness of people with mild to moderate dementia in maintaining ADL function. And it also can reduce the care pressure of main caregivers and empower ability of them.



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