

THE RELATIONSHIP BETWEEN DIET QUALITY AND COGNITIVE FUNCTION AMONG BREAST CANCER SURVIVORS

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UNDERGRADUATE

INTRODUCTION

- Dietary factors and quality of life among breast cancer survivors are highlighted by the rising in survival rate [1].
- Breast cancer survivors are found to have a **higher risk** of cognitive impairment [2].
- A previous study showed that **higher diet quality** is a potential approach in **improving cognitive function status** [3].
- However, there is still **lack of evidence** to determine the role of dietary factors in protecting cognitive function among breast cancer survivors.

OBJECTIVE

To determine the relationship between diet quality and cognitive function among breast cancer survivors

METHODOLOGY

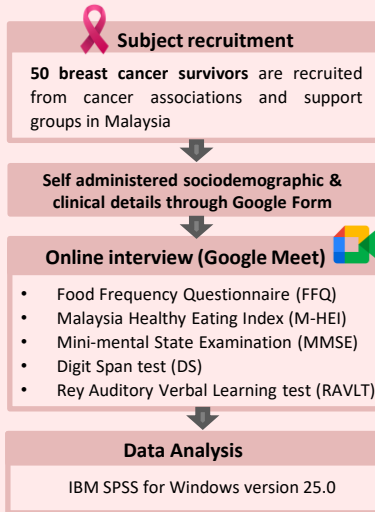
Study Design: Cross-sectional study
Sampling: Purposive sampling
Ethics code: JEP-2021-649

Inclusion Criteria

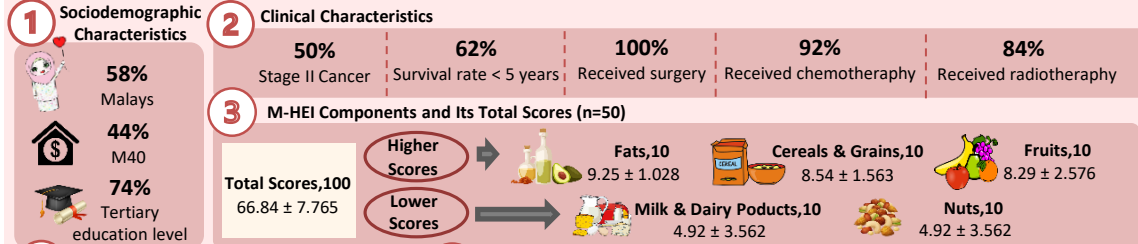
- Malaysian citizen >18 years old
- Completed active cancer treatment including surgery, chemotherapy or radiotherapy for at least > 6 months
- Not having major depression (DASS-21 test total scores < 20)

Exclusion Criteria

- Breast cancer fighters or secondary breast cancer survivors
- Pregnant woman
- Unable to speak, communicate and understand Malay, English and Mandarin



RESULT & DISCUSSION



4 Table 1:
Performance of Cognitive Function Tests (n=50)

Cognitive Function Tests	Score (mean ± s.p.)	Score Range
MMSE test		
Total scores	28.52 ± 1.233	26 - 30
Digit Span Test		
Forward	5.10 ± 1.389	2 - 7
Backward	5.24 ± 1.546	2 - 7
RAVLT test		
Immediate	56.26 ± 7.007	42 - 71
Delayed Recall	14.42 ± 0.883	12 - 15

5 Table 2: Performance of Cognitive Function Tests (n=50)

M-HEI components, scores	MMSE Test (n= 50)	
	P value (rho)	P value
Fish & seafoods, 10	-0.359*	0.011

Significant at *p<0.05, using Spearman rho test

- Nuts and milk and dairy products has the **lowest M-HEI scores** among breast cancer survivors as consumption of them is reported to **increase the risk of recurrence and active cancer cells** [4]
- The **overall performance** in each cognitive function test is **higher than** the mean score from previous studies [5]
- There is a **significant negative correlation** between fish and seafoods scores with MMSE scores which is **inconsistent** with previous study from [6]

CONCLUSION

- Study did not show a **consistent and significant correlation** between diet quality and cognitive function among breast cancer survivors
- This situation might be due to **less diverse in sociodemographic characteristics** as majority of them have higher level of education.
- Hence, further study could adapt this protocol to a **larger and representative sample size** and suggested to **compare the results with healthy women**.

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