

INTRODUCTION

consumption of healthy food items ↑ and unhealthy food items ↑¹
(1990–2010)



Diet quality of Malaysian adults either **poor/ required improvement** but there are limited study looking into the diet quality of urban poor locally.²

- The COVID-19 pandemic ↑ the severity of food insecurity, unemployment, and mental health that influence the diet quality of the population.³
- Gardening is deemed to be a holistic and sustainable solution to address these issues but there is no study looking into the involvement in gardening and diet quality.⁴

OBJECTIVE

To examine the association between sociodemographic factors (*age, sex, educational level, employment status, household size, household income*), individual factors (*depression, anxiety, stress, food security*), involvement status in gardening with diet quality among adults in Rumah Pangsa AU2 Keramat, Kuala Lumpur.

METHODOLOGY

- Cross-sectional study
- Rumah Pangsa AU2 Keramat
- Convenience sampling

- 117 eligible respondents
- Face-to-face interview/ self-administer
- 6th to 28th November 2021

Inclusion criteria:

Malaysian, residents of Rumah Pangsa AU 2, Taman Keramat aged 18 to 59 years old, did not change food habits in the past 6 months, not a vegetarian, not lactating, postpartum or breastfeeding.

Study instruments consist of:

- Sociodemographic background
- Depression, Anxiety & Stress 21⁵
- Six-Item Short Form of Food Security Status⁶
- Involvement in gardening
- Global Physical Activity Questionnaire[#]
- Single-day 24-hour diet recall
- Dietary misreporting⁷
- Malaysian Healthy Eating Index (M-HEI)^{* 8}

*Adapted to Malaysian Dietary Guidelines 2020⁹
#To increase sensitivity of dietary misreporting

Data analysis:

- IBM SPSS (Descriptive & bivariate analysis)

Pearson product moment, Spearman correlation, Fisher's exact test, independent sample t-test, One-way ANOVA, Mann-Whitney U test and Kruskal-Wallis test

RESULTS & DISCUSSION

Sociodemographic background (n=117)

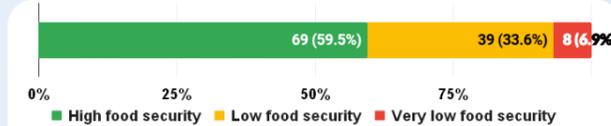


- 50-59 years old (40.98 ± 11.95)
- Female (65.8%), Married* (66.7%)
- Secondary education (65.8%)
- Employed[#] (58.6%)

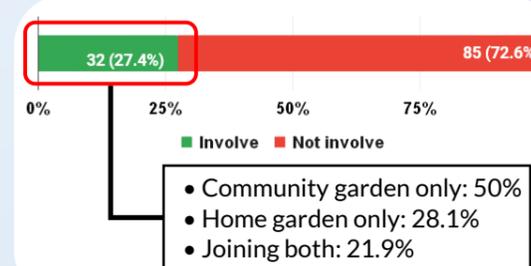
- Household size 4-6 (4.61 ± 1.61)
- Household income* <RM4850 (RM2743.86 ± 1717.02)

* n=114
n=116

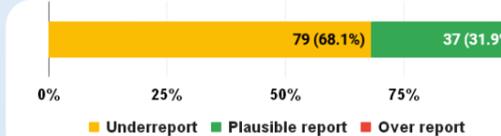
Food security (n=116)



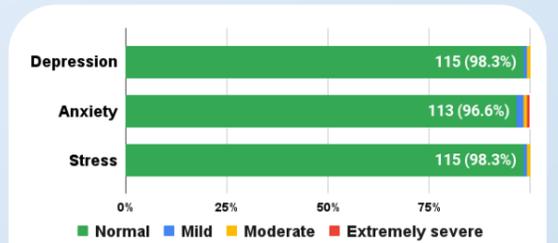
Involvement in gardening (n=117)



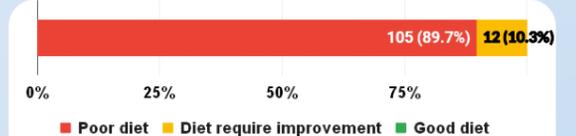
Dietary misreporting (n=116)



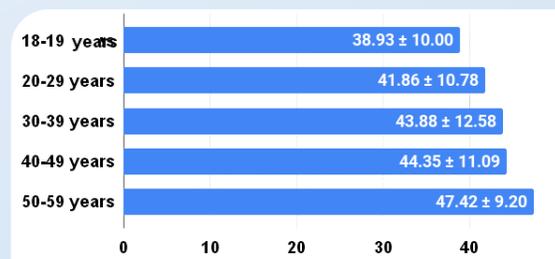
Depression, anxiety & stress (n=117)



Diet quality (n=117)



Association between sociodemographic background & diet quality (n=117)

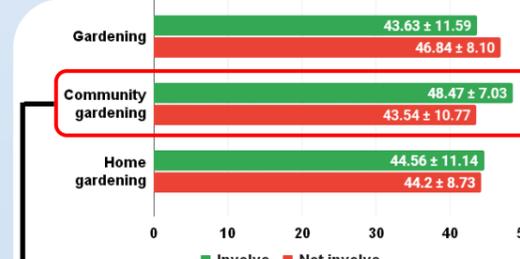


Age (r= 0.20, p= 0.034)

* Sex, marital status, educational level, employment status, household size and household income are not significantly associated with diet quality.

Older adults tend to have a better diet quality. This is because they **are more resistant towards nutrition transition** and more likely to be **involved in gardening activities**.¹⁰

Difference between involvement status in gardening & diet quality (n=117)



Community gardening (t= -2.63, p= 0.011)

* Gardening includes both community and home gardening. There is no significant difference in the involvement of gardening and home gardening with diet quality.

Respondents joining community gardening have better diet quality.^{11,12} This is because it encouraged the **consumption of a primarily plant-based diet, reduced red meat and highly processed food intake while increased home cooking**.¹² Hence, participants of community gardening are **more aware of health and ethical issues** when it comes to making food choices.¹¹

Difference between involvement status in gardening & M-HEI components (n=117)



Fruit (Mann-Whitney U= 1045.0, p= 0.036)
Involve: 1.00 (0.00 – 2.00)
Not involve: 0.00 (0.00 – 1.00)



Total fat (t= 2.27, p= 0.025)
Involve: 28.84 ± 8.78
Not involve: 32.93 ± 8.66

* The rest of the M-HEI components were not significantly different with the involvement status in gardening.

Those who were involved in gardening had a significantly higher intake of fruits¹³ and lower intake of total fat.¹⁴ This is because there is a **decreased in fast food availability at home and consumption**.^{15,16} Besides accessibility to fruits among gardeners, they may have a **higher interest and preference for the cultivated crop** that contributed to a positive dietary behaviour.¹⁷

REFERENCE



CONCLUSION

The study concludes that only age and involvement in community gardening have a significant positive association with diet quality. Further research should be conducted to evaluate the causal effects of gardening and diet quality along with the interventions to improve the diet quality of Malaysians.