FOOD SECURITY STATUS AND ITS COPING STRATEGIES AMONG HOUSEHOLDS WHO RECEIVED THE LOST FOOD PROJECT (TLFP) IN SELECTED LOW-COST PUBLIC HOUSING AREA IN KLANG VALLEY (JKEUPM-2020-455)

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UNDERGRADUATE

INTRODUCTION

Food insecurity has becoming one of the major issues in both developed and developing countries, especially in urban areas. The global urban population (54% in 2020) is projected to increase by 60% in 2030 (Knorr et al., 2018). There are many organizations in Malaysia, endeavoring in providing food assistance to the needy community. The Lost Food Project (TLFP) is a non-profit organization who continuously working on their strategic plan in combating the food insecurity problem by distributing food surplus to low income households within Klang Valley.

The objective of this study is to determine food security status and its coping strategies among households who received TLFP in selected low-cost public housing areas in Klang Valley.
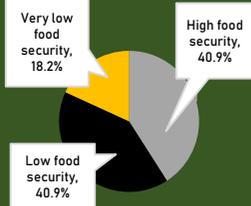
METHODOLOGY

- Cross-sectional study
- Convenience sampling
- Residents of seven (7) low-cost public housing areas in Klang Valley
- Involved 88 representatives from each households aged 18 years old and above, categorized in B40, staying in low-cost public housing area and must received TLFP products (ie. rice, bread, flour, cooking oil , sugar, etc)
- Data were collected by using face-to-face interview (n=33), phone interview (n=28) and self-administered (n=27)

The questionnaire has 5 sections:

SECTION A	Socioeconomic background
SECTION B	Food assistance
SECTION C	Nutrition knowledge (Norimah et al., 2008) • 20 items • Poor (0-10), Moderate (11-15), Good (15-20)
SECTION D	Food security status (USDA, 2012) • 6 items • High FS (0-1), Low FS (2-4), Very low FS (5-6)
SECTION E	Malaysian Coping Strategies Index (MCSI) (Norhasmah et al., 2010)

RESULTS & DISCUSSION

Prevalence of food insecurity

- Very low food security, 18.2%
- High food security, 40.9%
- Low food security, 40.9%

Level of nutrition knowledge

- Poor 35.2%
- Good 27.3%
- Moderate 37.5%

72.7% satisfied of respondents with the TLFP products

88.7% useful of respondents think the products are to their households

86.4% significant of respondents feel the products are to their households

Overall satisfaction towards TLFP:

The most adopted coping strategies:

84.7% using less expensive food

According to Consumer Food Choice Model (Furst et al., 1996), food price will be the most significant factors to choose the food and extra money will be allocated to the other essential needs.

78.6% allocating money to buy staple and less preferred food

According to Attachment Theory and maternal altruism (Bowlby, 1969/1982), the mothers are instinctively and willingly to sacrifice their own nutritional needs and satiety to protect their children's diet.

47.0% reducing the number of meals eaten in a day

According to Ernst Engel's Law (Zimmerman, 1932), the percentage of income allocated for food purchases increases as income decreases.

### Associations between socioeconomic backgrounds with food security status

Home ownership status

- Rent: 50, 80.4
- Owned: 50, 19.6
- Types of home ownership

SIGNIFICANT $X^2 = 7.593$, $p = 0.006$

If households own their house, it could reduce the expenses on house rent and allocate the extra money to purchase more food. Owning house could eventually reflects the presence of household's wealth and assets and protects the owner from temporary income shocks (McIntyre et al., 2016).
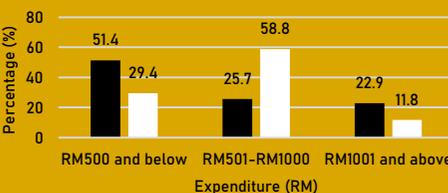
Household income

- RM2000 and below: 62.9, 86
- RM2001 and above: 37.1, 14
- Income (RM)
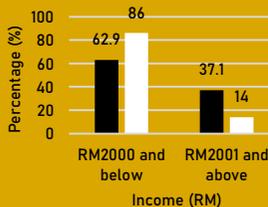
SIGNIFICANT $X^2 = 4.910$, $p = 0.027$

Household with better income can afford sufficient quality food; meanwhile households with lower income will opt for lower variety of food (Ashgar & Muhammad, 2013).

Monthly food and drinks expenditure

- RM500 and below: 51.4, 29.4
- RM501-RM1000: 25.7, 58.8
- RM1001 and above: 22.9, 11.8
- Expenditure (RM)
- ■ High food security □ Low food security

SIGNIFICANT $X^2 = 9.208$, $p = 0.011$

Lower income households with greater expenditure on food and drinks are prone to undergo food stress (Mackay et al., 2018).

Comparison of number of food items received between food secure and food insecure households (n=88)

Group	n	Mean	SD	t	p
Food secure	36	26.86	3.603	1.324	0.189
Food insecure	52	25.85	3.489		

NOT SIGNIFICANT ➤ due to the rotation system where every residents will involve in the food assistance program

Comparison of the mean MCSI score between food secure and food insecure households (n=86)

Group	n	Mean	SD	t	p
Food secure	36	11.29	11.06	-4.310	<0.001
Food insecure	50	26.95	22.13		

SIGNIFICANT ➤ The mean of MCSI scores of those food insecure was significantly higher compared to those who were food secure.

CONCLUSION

The study concluded that lower household income, higher food and drinks expenditure and those who rent the house may become the risk factors to household's food insecurity problem. Thus, the situation forced them to applied more food-related coping strategies, in which give impacts towards their diet quality. Further research should be conducted on the effectiveness of TLFP in helping them to improve Malaysian's food security status.

References