

DIETARY BEHAVIOUR AND DEPRESSION

AMONG ADOLESCENTS IN MALAYSIA

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INTRODUCTION

In recent times, there has been a growing global concern regarding adolescent depression in the realm of mental health. Researchers and healthcare professionals are giving greater importance to understanding the impact of mental health on overall well-being, particularly among school-going adolescents, and they are eager to investigate how dietary behaviors influence mental health outcomes [1-4].

Adolescence represents a critical developmental phase marked by significant physical, emotional, and social changes, and it is during this period that long-term dietary habits are established. The changing dietary patterns in diverse cultures raise worries about their potential contribution to mental health issues like depression. Studying the connections between dietary behaviors and depression in this age group is essential to formulate effective strategies for preventing and intervening in mental health issues, ultimately leading to enhanced mental well-being and reduced risk of depression.

The aim of this study was to assess the associations between dietary behaviours and depression among Malaysian school-going adolescents.

METHODS

1. This study utilised data from the Adolescent Health Survey 2022, a nationwide cross-sectional study of secondary adolescents aged 13-17 in Malaysia.
2. A two-stage multistage stratified cluster sampling method was employed. In the first stage, secondary schools were chosen from all eligible schools in Malaysia. The second stage involved class selection, with all classes from Form 1 to 5 included in the sampling frame. Classes were chosen using systematic probability sampling with a random start from each selected school. All adolescents in the selected classes were invited to participate in the survey.
3. A total of 33,523 adolescents from 239 schools participated in the survey.
4. A validated self-administered questionnaire was used for data collection.
5. Depression was measured using the Patient Health Questionnaire (PHQ-9). A positive score was defined as a score of 10 and above, and participants with these scores were categorized as having depression.
6. Dietary behaviours were assessed using a standard questionnaire.
7. Descriptive and complex sample logistic regression analyses were performed using SPSS version 26.0.

RESULTS

Figure 1: Prevalence of depression among school-going adolescents in Malaysia (N=9103)

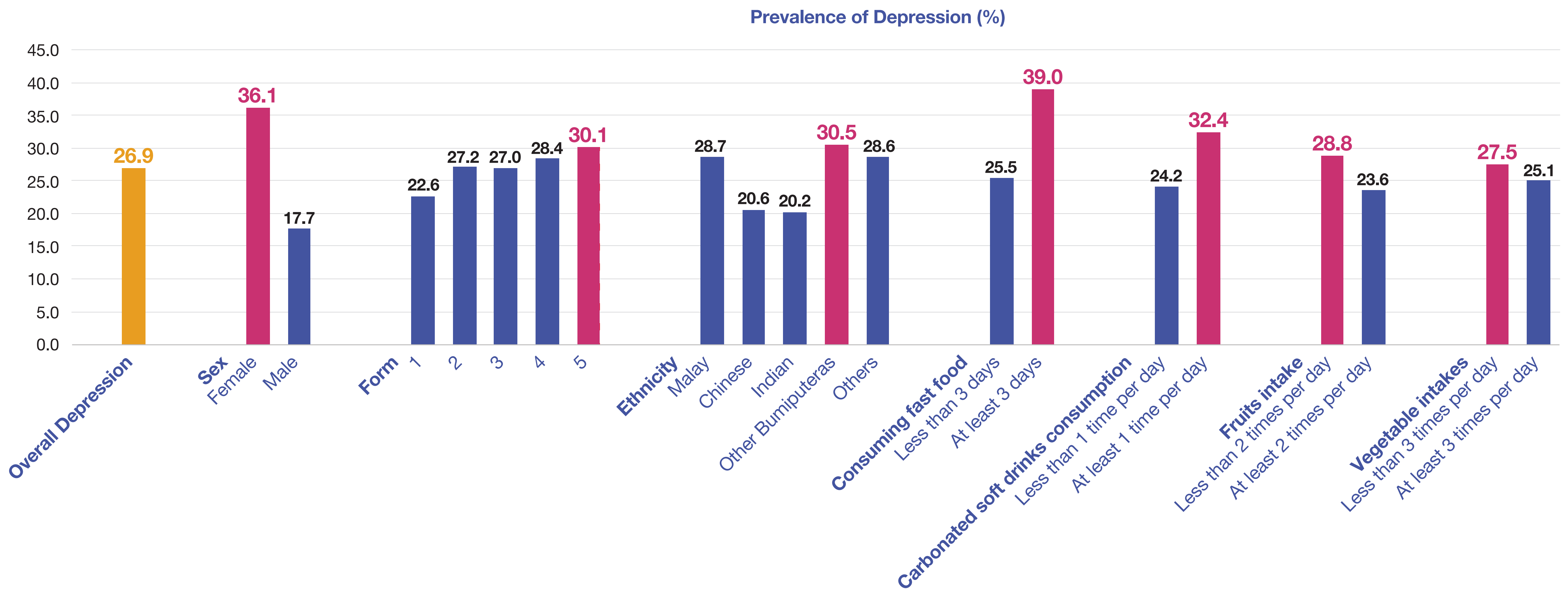


Table 1: Factor associated with depression among school-going adolescents in Malaysia

Variables	Adjusted OR (95% CI)	p-value
Gender		
Male	1.00	
Female	2.71 (2.51,2.92)	<0.001
Form		
1	1.00	
2	1.29 (1.16,1.41)	<0.001
3	1.27 (1.13, 1.43)	<0.001
4	1.38 (1.24,1.54)	<0.001
5	1.49 (1.33,1.66)	<0.001
Ethnicity		
Malay	1.00	
Chinese	0.64 (0.53,0.78)	<0.001
Indian	0.59 (0.48,0.71)	<0.001
Other Bumiputeras	0.99 (0.83,1.19)	0.919
Others	0.96 (0.73,1.26)	0.741
Consuming fast food		
Less than 3 days	1.00	
At least 3 days	1.73 (1.55, 1.93)	<0.001
Carbonated soft drinks consumption		
Less than 1 time per day	1.00	
At least 1 time per day	1.59 (1.48,1.70)	<0.001
Fruits intake		
Less than 2 times per day	1.00	
At least 2 times per day	0.69 (0.65,0.74)	<0.001
Vegetable intakes		
Less than 3 times per day	1.00	
At least 3 times per day	1.03 (0.95,1.12)	0.499

DISCUSSION

1. One out of four school-going adolescents in Malaysia reported experiencing depression.
2. The study revealed a positive association between unhealthy behaviors, such as consuming fast food and carbonated soft drinks, and depression. These results are consistent with a prospective study involving Australian [3] and Korean adolescents [4].
3. Similarly, this research showed a negative association between healthy dietary behaviors, such as fruit consumption, and depression, aligning with findings from earlier studies [2-4].

CONCLUSION

This study highlights the strong cross-sectional evidence linking healthy dietary behaviors, specifically fruit consumption, to reduced depression levels. On the other hand, unhealthy behaviors like fast-food and carbonated soft drink consumption were linked to higher depression levels. These findings emphasize the need for effective public health programs that prioritize mental health and encourage healthy eating habits in adolescents, potentially leading to improved mental well-being and overall health outcomes for this vulnerable population.

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