



BREAKFAST HABITS AND WEIGHT STATUS OF ADOLESCENTS AGED 17-19 YEARS LIVING IN SANDILIPAY MEDICAL OFFICER OF HEALTH AREA, JAFFNA DISTRICT

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Adolescence period is characterized by rapid growth and maturation, making nutritional status during this stage vital for overall health. Dietary patterns established during the adolescence period have an impact on health status in later life. Breakfast, being the first and most important meal of the day, plays a significant role in school performance and overall well-being. Despite its importance, skipping breakfast is a common practice among the adolescents. The study aimed at assessing the breakfast habits, weight status and factors associated with irregular breakfast consumption among adolescents in the Sandilipay Medical Officer of Health (MOH) area of Jaffna district. A multistage stratified cluster sampling method was employed using an interviewer-administrated questionnaire with a 24-hour dietary recall and a one-week food diary to gather socio-demographic information and dietary habits. A total of 92 adolescents, aged 17 to 19 years, were interviewed through household visits in three Grama Niladhari divisions. Weight and height were measured and Body Mass Index (BMI) was calculated. Ethics Review Committee, Faculty of Medicine, University of Jaffna gave the ethical approval. Among the 92 participants, the majority were female (n=54, 58.7%). The mean ages for male and female adolescents were 18.37 (± 0.8) and 18.07 (± 0.8) years, respectively. About 31.5% (n=29) of the adolescents skipped breakfast on two or more days during the study week. Pittu, prepared with wheat flour, was the most frequently consumed breakfast item, followed by string hoppers, bakery products, rotti, dosa, idli, pulses, milk rice, samaposa, and biscuits. Key factors that lead to the avoidance of the breakfast were, not getting ready early to go to school, fasting based on religious reasons, disliking the food prepared or bought for breakfast and delay in preparing or buying the breakfast. Among the adolescents, 35.9% (n=33) were underweight. Notably, over half of these underweight adolescents (54.5%, n=18) had skipped breakfast on two or more days. This finding highlights the urgent need for targeted interventions to promote regular breakfast consumption, given its critical role in maintaining overall health and nutritional status in Sandilipay MOH area.

Keywords: adolescents, breakfast, Jaffna, underweight, nutritional status

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1. INTRODUCTION

The adolescent period is an important stage in human life as rapid growth and maturation occur (Venkaiah *et al.*, 2002). It is the transition period between childhood and adulthood. Dietary patterns in this stage have an impact on the nutritional status in later life (Ahmad *et al.*, 2009). Good nutrition is essential for better academic performance and productivity which can lead to socio economic development of a country (Galgamuwa *et al.*, 2017). Poor eating habits and physical activity patterns in childhood accumulate health related problems leading to obesity, heart disease and osteoporosis during adulthood. Skipping breakfast is common among adolescents (Nafis *et al.*, 2014).

Breakfast is the first and most important meal in a day and it should be consumed before mid-morning (Gibney *et al.*, 2018). Regular breakfast eaters exhibit positive effects such as passion, interest, energy level, psychological alertness, happiness and willpower rise sharply from the morning to noon in regular breakfast eaters (Handuwala *et al.*, 2021)

Skipping breakfast is also a trend these days as adolescents rush to private classes before school. Breakfast is an important meal among the meals, which plays an important and beneficial role in the performance at school. Those who are in the age group between 17 and 19 years study G.C.E. Advanced Level in schools. In Jaffna District, these adolescents are sent to several private classes before and after school. The classes run before and after school. Daily, most school children skip breakfast to attend classes every day (Jayatissa and Ranbanda, 2006).

The study aimed to identify the breakfast habits, weight status and factors associated with irregular breakfast consumption as well as to find the weight status among adolescents aged 17-19 years of Sandilipay Medical Officer of health (MOH) area in Jaffna district

2. MATERIALS AND METHODS

A descriptive cross-sectional study was carried out to find the nutritional status of adolescents (between 17 and 19 years) of Jaffna district. A multistage stratified cluster sampling was used to identify a sample that represents the adolescent population of Jaffna district in 12 medical officer of health (MOH) areas. Clusters were allocated according to probability proportion of size (PPS) A subsample was used to identify the breakfast habits of adolescents in Sandilipay Medical Officer of Health (MOH) Area, Jaffna such as Savatkadu (J/131) Anaicoddai (J/133) and Navali North (J/134) Grama Niladhari divisions.

First household was selected randomly in each GN division. Next house to be visited was the fourth house from the right side of the first house. In each house visited all males and females in the age group between 17 and 19 were listed and the person to be interviewed was selected using the date of birth. The person with higher age was interviewed. Written informed consent was obtained from participants.

An interviewer administered questionnaire was administered to assess the sociodemographic information of 92 participants. Dietary information was obtained from the, 24 hours dietary recall method and food diary. The participants were asked about the type of foods consumed for breakfast, breakfast skipping habits and reasons for skipping breakfast. Measurements of Weight and Height were taken to calculate body mass index (BMI).

Ethical clearance was obtained from Ethics Review Committee, Faculty of Medicine, University of Jaffna.

3. RESULTS AND DISCUSSION

Out of the total 92 adolescents 38 were males (41.3%) and 54 were female (58.7%). Mean age of the male and female adolescents were 18.37 (\pm 0.8) and 18.07 (\pm 0.8) years respectively. 57 adolescents attend school.

Pittu, string hoppers, bakery items, *rotti*, *dosa*, *idli*, pulses, milk rice, samaposa and biscuits were consumed for breakfast. *Pittu*, string hoppers, hoppers, *rotti*, *uppuma*, *poori* and milk rice with jaggery and bread are the common foods consumed by Jaffna people. Food items consumed by Jaffna people are unique. (Arasaratnam, 2016). Food is intertwined with the culture of the country, personal preferences, incomes, socio-economic patterns, commodity prices, beliefs, (Bandara *et al.*, 2021).

Table 1: Weight status of adolescents of (17-19 years) from Sandilipay MOH area

Gender	Underweight No (%) BMI below 18.5	Normal weight No (%) BMI 18.5-24.9	Overweight No (%) BMI 25-29.9	Obese No (%) BMI above 30
Male	11 (29%)	11 (29%)	8 (21%)	8 (21%)
Female	22 (40.7%)	25 (46.3%)	7 (13%)	0 (0%)
Total	33 (35.9%)	36 (39.1%)	15 (16.3%)	8 (8.7%)

Table 1 shows the weight status of adolescents. Among the adolescents, 35.9% (n=33) were underweight with a higher proportion of females compared to males being underweight.

Table 2: Skipping breakfast for two or more days by adolescents (17-19 years) with different weight status from Sandilipay MOH area

Underweight No (%)	Normal weight No (%)	Overweight No (%)	Obese No (%)
18 (62.1%)	6 (20.7%)	4 (13.8%)	1 (3.4%)

According to the food diary 31.5% of the adolescents (n=29) skipped breakfast two or more days in the assessment week. The findings from 24 hours recall revealed that 15.2% (n=14) adolescents did not consume breakfast on the day of assessment. A study conducted by Sincovich *et al.* (2022) among adolescents regarding skipping breakfast revealed that 31.5% of the participants skipped breakfast. Notably, over half of these underweight adolescents (54.5%, n=18) had skipped breakfast on two or more days. Among them more underweight females (n=11) skipped breakfast compared with that of males.

Skipping breakfast has become a regular norm in busy world nowadays due to the change of lifestyle of the people. Studies show that skipping breakfast negatively impacts the class attendance, academic performance, emotional status and mood of adolescents of Sri Lankan adolescents (Handuwala *et al.*, 2021; Vishnukumar *et al.*, 2017). Getting late to go to school, fasting, dislike the food prepared/bought for breakfast, getting late to prepare/buy breakfast at home and no breakfast was prepared/bought at home were found as the reasons for skipping breakfast.

Breakfast consumption is an important aspect of a healthy lifestyle which provides nourishment for physical and cognitive function (Sincovich *et al.*, 2022). Parents must ensure the breakfast consumption of their children before going to school. Easily consumable foods can be prepared at home to encourage the child to eat at home with limited time available before school. Interventions should be implemented in schools to enhance the breakfast consumption among adolescents, including providing healthy breakfast at school meal programme, nutritional education, healthy canteen and breakfast clubs are some



of the advice for the schools to improve the breakfast consumption. The importance of breakfast should be incorporated into public health programme and school educational activities (Vishnukumar *et al.*, 2017)

CONCLUSION

The study revealed that there is a considerable prevalence (31.5%) of skipping breakfast among adolescents between 17 and 19 years in Sandilipay MOH division, Jaffna district. As breakfast is the important meal of the day, parents and schools should pay attention to enhance the consumption of breakfast among adolescents. The importance of breakfast should be emphasized into public health programme and school educational activities.

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