BARRIERS TO HOME PREPARED MEALS IN FAMILIES WITH ADOLESCENTS IN URBAN UNDERSERVED SETTLEMENTS OF JAFFNA MUNICIPALITY AREA

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ABSTRACT

Sociodemographic barriers limit access to healthy food in underserved communities. This study explored barriers to home-prepared meals among adolescents aged 17–19 years in underserved settlements of the Jaffna Municipality area. Household visits were conducted in 100 homes, including observations of house structures, cooking facilities, and interviews using an interviewer-administered questionnaire. The sample comprised 48% males and 52% females, with families averaging 2.64 (±1.2) children and 1.68 (±0.6) adolescents. Severe overcrowding was identified, with 74% of households sharing a single residence and an average family size of 5.16 (±1.4). A major barrier was inadequate kitchen facilities; 36% lacked chimneys, reducing ventilation and cooking efficiency, while many relied on temporary kitchen setups. Moreover, 76% of households were nuclear families struggling with cooking in crowded conditions. Affordable nearby shops offering rotti and curry led 44% of households to purchase meals daily. These challenges highlight the need for interventions to improve infrastructure and promote healthier eating.

Keywords: *Adolescents, Jaffna, underserved settlements, home prepared meals*

Introduction

Access to healthy food is essential for maintaining overall well-being, however, in underser communities, economic insecurity, physical access limitations and environmental constraints of restrict families' ability to prepare meals at home (Wolfsan *et al.*, 2019). In underserved settlements families often face challenges in assessing home prepared meals such as overcrowded living conditio poor ventilation and limited space for cooking. Infrastructural inadequacies leads to purchase food fr outside rather than cooking at home (Muggah *et al.*, 2015) .

Adolescence is a multifaceted developmental stage that bridges childhood and adulthood, marked significant biological, psychological, and social transformations. The description of adolescence vari across disciplines and cultures, leading to diverse definitions and classifications (Sawyer *et al.*, 201 Adolescence is a key stage characterized by rapid physical growth, hormonal changes, and cogniti development, all of which necessitate increased protein intake to meet the demands of the body metabolic and structural changes (Pfeifer and Berkman, 2018). Adolescents are one of the nutritionall vulnerable groups and their dietary quality is strongly influenced by the household capacity to prepar healthy meals.

...y aims to find the barriers to assess home prepared melas among families with adolescents (17-...g in underserved settlements of Reclamation area of Jaffna Municipality.

...dology

...cal clearance was obtained from the Ethics Review Committee of Faculty of Medicine, ...y of Jaffna. A cross-sectional study was conducted throughout the Jaffna district to find the ...al status of adolescents. The particular study was conducted in Reclamation area of Jaffna ...ipality. Initially, a household was chosen at random. Subsequent households were selected ...matically, with every fourth house from the right side of the initially chosen house being visited. In ...ected household, all individuals aged 17 to 19 were listed, and the participant to be interviewed ...cted based on their date of birth, prioritizing those with the higher age. Written consent was ...ed from the selected participants before proceeding with the interview. Socio-demographic data ...collected through an interviewer-administered questionnaire. Cooking practices and meal ...ing behaviors was asked by the parents of the participants. Also, data collection was involved ...servation of kitchen facilities, cooking equipment and fuel sources. Discussion was carried out ...gama Niladhari, Public Health Midwife and local food shop owners.

...lts and Discussion

...udy samples comprise 48% of male and 52% of female participants. On average, each family had ...±1.2) (range 1-6) children, of which approximately 1.68 (±1.2) (range 1-3) were adolescents, ...ting a high proportion of youth within the household structure. The adolescent males and females ...having the mean ages of 18.05 (±0.2) and 17.82 (±0.1) years respectively. Majority of the family ...) depended on fishing as their primary source of livelihood underscoring the socioeconomic ...erabilities of the study population.

...re overcrowding was a notable characteristic of the community, with 74% of households sharing a ...le residence with other families. Such shared living arrangements often result in limited privacy, ...ined use of common spaces, and competition for essential facilities such as kitchens and sanitation. ...average household had 5.16 (±1.4) (range 2-9) members, and the limited housing space made the ...g environment crowded. This level of crowding not only impacts daily comfort and hygiene but also ...es challenges for preparing and consuming home-cooked meals, potentially influencing dietary ...ices and overall family well-being.

...notable 36% of households lacked chimneys, resulting in poor ventilation and discomfort during ...oking. Research from urban slums in Nairobi and other settings indicates that insufficient ventilation ...d absence of proper kitchen openings significantly increase exposure to fine particulate matter and ...her indoor pollutants, which are associated with respiratory issues particularly among women and ...ildren (Muindi *et al.*, 2016). In India Bangalore's urban slums, families have struggled to install ...himneys due to spatial and structural limitations, forcing them to adapt with makeshift cooking ...rangements that compromise comfort and functionality (Nayak and D'Souza, 2016).

...irewood was widely used as the primary cooking fuel and its cost posed a significant economic burden ...n the study area In Sri Lanka, firewood remains the dominant cooking fuel with over two-thirds of ...households depending on it and its use is linked to increased respiratory illness and healthcare utilization, ...including a 10.9 % rise in asthma prevalence and higher outpatient and inpatient visits (Pallegedara and ...Kumara, 2021).

The convenience of nearby shops offering ready-made breakfast foods (rotti and curry) led 44% of households to purchase meals daily, indicating a shift away from home cooking. Studies show that in resource-constrained environments, ready-made foods can become a more accessible option than preparing meals in spaces lacking infrastructure, exacerbating reliance on less nutritious, convenience-based diets (Kumar *et* al., 2022). Purchasing meals from outside, particularly for breakfast and dinner, encourages adolescents to consume unhealthy carbonated beverages alongside food, contributing to nutritional problems (Ratnayake and Ekanayake, 2012)

Conclusion

The study highlights the barriers to assess home prepared meals accessing home-prepared meals among families with adolescents (17-19 years) in underserved settlements of the Jaffna Municipality area. Overcrowded living conditions, inadequate kitchen facilities, poor ventilation and the high cost of cooking fuel significantly hinder regular home cooking. The affordability of ready-made meals alongside income-generating food sales within the community, shift dietary practices towards convenience-based options. These factors threaten the nutritional quality of adolescents' diets and contribute to public health concerns. Addressing these challenges will require integrated interventions that improve household infrastructure, promote clean and affordable cooking solutions and encourage healthy eating behaviors through community-based nutrition programs.

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