

Factors associated with consumption of fruits and vegetables amongst adults in the Alfred Duma Local Municipality, Ladysmith.

Thandi Xaba¹ and Siyabonga Dlamini^{2,3}

¹ Uthukela Health District, ² Public Health Medicine, School of Nursing and Public Health, University of KwaZulu-Natal, ³ Cancer & Infectious Diseases Epidemiology Research Unit, College of Health Sciences, UKZN



BACKGROUND

- Non-communicable diseases (NCDs) account for more than 63% of all deaths globally.
- It is projected that the cost to public health systems and world economies will exceed \$30 trillion over the next 20 years due to the burden of NCDs.
- Adequate consumption (5 servings per day) of fruits and vegetables is linked to a lower risk of NCDs.
- One of the critical health behaviours that can help prevent mortality related to NCDs.
- Despite the benefit of adequate consumption of fruits and vegetables being widely documented, the levels of consumption remain low across the globe.
- A wide variety of factors associated with the consumption of fruits and vegetables are documented.
- This study was aimed at determining these factors specifically in Alfred Duma Local Municipality (ADLM), Ladysmith in KwaZulu-Natal (KZN).

OBJECTIVES

- a) To describe the socio-demographic, psychosocial, environmental and socio-economic profile of adults aged 18–64 years (study participants) in ADLM.
- b) To assess the level of consumption of fruits and vegetables
- c) To investigate the association between socio-demographic, psychosocial, and socioeconomic factors and the consumption of fruits and vegetables.

METHODOLOGY

- An observational, analytical, cross-sectional study involving 164 households from six selected municipal wards in ADLM was conducted.
- Adult males and females aged 18–64 years of age, fluent in either English or isiZulu, living within the geographical boundaries of ADLM between November 1, 2017, and May 30, 2018, were included.
- A structured questionnaire using a combination of the 24-hour recall method and food frequency was used to collect data.
- Data were analysed using SPSS version 25 (IBM Corp, Armonk, NY, USA).
- Multivariate analysis was used to identify factors associated with the consumption of 2–3 or more servings of vegetables daily and 2 or more servings of fruit daily.
- Binary logistic regression was used to measure the strength of the associations between daily consumption and other variables.
- The results were adjusted to eliminate confounding.
- The level of significance was accepted as p-value < 0.05.

RESULTS

- A total of 164 households participated in the study, with a response rate of 100%.
- Only 0.6% (n = 1) of participants were found to be consuming an adequate amount of fruits and vegetables daily.
- Employment was associated with the consumption of 2–3 daily servings of vegetables and two for fruits (OR 2.37; p-value 0.01 and OR 5.22; p-value < 0.001 for vegetables and fruits, respectively).
- Local availability of vegetables was associated with consumption of vegetables (OR 2.35; p-value 0.014) but not fruits.
- The cost of both fruits and vegetables was reported by participants as the major constraint, as 42.1% (n=69) of participants reported the cost of fruits as a constraint to consumption, while 34.1% (n=56) reported the cost of vegetables as a constraint to consumption.

CONCLUSIONS

- This study concludes that the extreme lack of adequate intake of fruits and vegetables in ADLM requires attention,
- Addressing the constraints identified (cost and availability) and enhancing the identified enablers are recommended.
- Fruits and vegetables need to be made available locally to lower the costs.
- Advocating for and supporting local fruits and vegetables retailers needs to be explored.
- The results of this study suggest that fruits and vegetables may need to be made more affordable and accessible for poor households with household incomes of less than R2 000.
- Policy-makers (government, the Department of Agriculture leading the process) may make redeemable vouchers available (only redeemable for fruits and vegetables), which these households can redeem at their local supermarkets and/or farm stalls.

ADVOCACY MESSAGE

- These commodities (fruits and vegetables) should be subsidised by the government so that residents purchase them at reduced retail/supermarket prices.
- If brown bread could be subsidised to make it more affordable because of its nutritional benefits over white bread, the same could be done for fruits and vegetables, more so because their benefits have been demonstrated.
- Health promotion messages encouraging communities to invest in their own health should be developed and promoted.
- The development of community gardens and the provision of various resources should be encouraged for the sustainability of these initiatives.