Author: Briony Stevens

Co Author: Julie Brimbecombe, Alan Clough, Jenni Judd, Daniel Lindsay

Topic: Nutrition and Food Security

Title: Seasonality and its role on the diet and food security of pregnant women living in rural Bangladesh

Presentation Type: Poster

Title: The role of seasonality on the diet and food security status of pregnant women living in northern Bangladesh

Briony Stevens[1], Julie Brimbecombe[2], Alan Clough[1, 3, 4, 5], Jenni Judd[3, 4, 6, 7,] Daniel Lindsay[1]

[1]School of Public Health, Tropical Medicine and Rehabilitation Sciences, James Cook University, Townsville, QLD, Australia; [2]Menzies School of Health Research, Darwin, NT, Australia; [3]Anton Breinl Centre for Health Systems Strengthening, James Cook University, Townsville, QLD, Australia; [4]Australian Institute of Tropical Health and Medicine, James Cook University, Townsville, QLD, Australia; [5]Centre for Research Excellence in the Prevention of Chronic Conditions in Rural and Remote Populations, James Cook University, Cairns, QLD, Australia; [6]College of Medicine and Dentistry, James Cook University, Townsville, QLD, Australia; [7]School of Public Health and Social Work, Queensland University of Technology, Kelvin Grove, QLD, Australia.

Presenting author: Briony Stevens

Abstract

Introduction: Good nutrition during pregnancy is essential for ensuring foetal growth and development. This study aimed to investigate the association of seasonality with dietary diversity, household food security, and nutrition status of pregnant women in a rural district of northern Bangladesh.

Methods: A cross sectional study was conducted from February 2013 to February 2015 in Rangpur district, in northern Bangladesh. Skilled community nutrition volunteers

interviewed 288 pregnant women in 12 villages. Data were collected on demographics, household food security, dietary diversity, and mid-upper arm circumference. Descriptive statistics were used to explore demographics, dietary diversity, household food security, nutrition status, and inferential statistics were applied to explore the role of seasonality on diversity, household food security and nutrition status.
Results: Seasonality was found to influence dietary diversity (P = 0·026), and household food security (P = 0·039). Dietary diversity was significantly lower in summer (P = 0·029) and spring (P = 0·038). Food security significantly deteriorated in spring (P = 0.006) and late autumn (P = 0.009).
Conclusion: Seasons play a role on women's household food security status and dietary diversity, with food insecurity deteriorating during the lean seasons and dietary diversity deteriorating during the second 'lesser' lean season, and the season immediately after. Interventions that aim to improve the diet of pregnant women from low-income, subsistence-farming communities need to recognise the role of seasonality on diet, and food security and incorporate initiatives to prevent seasonal declines.