Obesity, Diabetes and Suboptimal Breastfeeding Practices in the Eastern Mediterranean countries

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Abstract

Background: The Eastern Mediterranean region (EMR) countries suffer escalating rates of overweight and obesity; increasing the burden of diabetes mellitus attributable to obesity. Optimal breastfeeding are linked with prevention of obesity and diabetes mellitus.

Aim: To identify the optimal breastfeeding practices that can reduce the burden of overweight, obesity and diabetes mellitus in the EMR countries.

Methods: This was a combined assessment double staged study. In the first stage WHO and UNICEF data base from household surveys for the 22 countries of the EMR for breastfeeding rates of timely first suckle (TFS), EBF, continued breastfeeding at 12 and 24 months and correlated and with data for overweight, obesity, high blood glucose and death from diabetes mellitus in children under five (CU5), youth and adults. In the second stage we conducted a retrospective cross-sectional survey of 60 university students suffering from obesity to examine the glucose metabolism and echocardiography on the heart.

Results: Obesity in the EMR countries is high and is on the rise. Breastfeeding practices mainly TFS and continued breastfeeding for 24 months are suboptimal in the EMR countries irrespective of their socioeconomic status. There were significant negative correlations between TFS and obesity among CU5 (r- 0.51) and obesity in adults (r-0.37). Continued breastfeeding for 12 and 24 months were also significantly correlated with obesity in CU5 (r- 0.475 and r-0.33 respectively) and obesity in adults (r-0.49 and r-0.52 respectively). Findings in the field study for the obese university youth showed high disturbance in glucose homeostasis and evidence of left and right ventricular strains on the heart with abnormal diastolic function.

Conclusions: Early feeding practices are suboptimal in EMR countries and influence the high rates of obesity and overweight which can have detrimental effects on the prevalence of diabetes mellitus and cardiovascular disease in the countries of the region. The origins of noncommunicable diseases are preventable early in infancy by optimal feeding practices.