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# Link of baby feeding with overweight and patient with obesity: Based on seven years of experience in two centers in Sulaimani Governorate, Kurdistan Region/Iraq



Hiwa Omer Ahmed <sup>a</sup>, Sabah Abid Abdulkarim <sup>b</sup>, Mahdi Aziz Hamamarif <sup>c</sup>.

- a. Professor in bariatric surgery, University of Sulaimani-College of Medicine
- b. General Surgeon, Sulaimani Teaching Hospital
- c. Pediatric surgeon, University of Sulaimani-College of Medicine

# Abstract

# **Background:**

Obesity is considered as a complex and multifactorial disease mainly attributable to risk factors of genetic, behavioral, socioeconomic, and environmental origins, among them, the association and causative role played by breast feeding, which has been shown to attenuate obesity risk.

# **Objectives:**

We aimed to evaluate state of the link of overweight and obesity with the types of feeding they were utilizing in the first six month of life.

#### Patients and materials:

The study designed as prospective cohort study, the work has been reported in line with the STROCSS criteria, (24), was conducted over a

period of seven years from 1<sup>st</sup> mays 2012 to 30<sup>th</sup> April 2019, including 1020 of the total of 1564 overweight and obese patients, All the patients were consulted single bariatric surgeon in two centers Hatwan Private Hospital and Bariatric Unite in Sulaimani teaching hospital-Sulaimani governorate-Kurdistan region-Iraq.

The patients were arranged in 2 groups:

- 1. Group A: 725 overweight or obese patients, who were exclusively breast-fed
- 2. Group B: 295 overweight or obese patients, who were exclusively bottle-fed

All the collected data were collected, organized and analyzed with Statistical Package for the Social Sciences (SPSS) version 21. Chi-square test adjusted for clinical characteristics were assessed at the conventional 0.05 level of significance, considering any P value  $\leq 0.05$  as statistically significant.



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#### **Results:**

About three quarter of the patients with overweight and obesity were bottle-fed (m=725, 71.08%), females were more prevalent in this group (B), the female to male ratio was 1.33/1. The most common age for bottle feeding were (20-29) and (30-39) years, in another words bottle feeding was present only in those patients aged less than 39 years, while those patients aging more than 40 years (40-59 years of age) were exclusively breast-fed.

Regarding the bottle-fed patients (group B), three hundred thirty six (81.16%) female patients, were recalling the type of feeding, versus 209 (67.20%) of the male breast-fed patients. Regarding parents, mothers (n=119, 16.41%) were outnumbering fathers (n=43, 05.94) in recalling the period of infancy and type of feeding.

# **Conclusion:**

Bottle feeding may have significant link with future risk of overweight and obesity Most of the overweight and patients with obesity who were bottle fed, also were below the age of 40 years. Which coincidental with the entry of bottle, breast-milk substitute to the area, after 1981, and more mothers were started to work outdoors, and Social and Audiovisual Media were encouraging factors for mire bottle feeding.

# **Keywords:**

Breast feeding, bottle feeding, breast milk substitute, obesity, overweight.