Clinical deficiencies in infant feeding

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Abstract

The way in which two clinical procedures related to infant feeding are carried out in medical consultations for children younger than six months in a health center in Mexico City is analyzed. The first one refers to infants' anthropometric measurement, and the second, to feeding modalities' identification. Corrective actions are required based on the quality of children's health care in the public sector.

KEY WORDS: Infant feeding. Anthropometry. Feeding modality.

Deficiencias en la labor clínica relacionada con la alimentación infantil

Resumen

Se analiza la forma como se llevan a cabo dos procesos clínicos relacionados con la alimentación infantil en las consultas médicas de niños menores de seis meses atendidos en un centro de salud de la Ciudad de México. El primero se refiere a la medición antropométrica de los infantes y el segundo, a la identificación de las modalidades alimentarias. Se requieren acciones correctivas en función de la calidad en la atención a la salud infantil en el sector público.

PALABRAS CLAVE: Alimentación infantil. Antropometría. Modalidad alimentaria.

Introduction

When analyzing the role of public health services with regard to infant feeding through a more far-reaching ethnographic case study, we found two problems related to infant feeding, observed in medical consultation for children younger than six months in a health center of Mexico City: low quality of anthropometry and inadequate identification of infant feeding modalities.¹

Infant feeding can be defined as human offspring's passage from a single source of nutrition, breast milk—or some substitute—during the first months, to the varied diet of each family, a process that takes approximately two years, when weaning or its equivalent occurs as bottle-feeding is discontinued. Various

elements of mothers and their babies' social, cultural, family and personal life point towards different modalities. A significant element is contact with health services, the information on infant nutrition that is provided in postnatal medical consultations at health centers.

The World Health Organization proposes exclusive breastfeeding (EBF) up to six months of age, with continued breastfeeding along with complementary foods up to 24 months of age or longer.^{2,3}

The decline in the practice of breastfeeding (BF) in Mexico has been documented for decades.⁴ In 2015, the National Survey of Boys, Girls and Women indicated that 94.9 % of children younger than two years had been breastfed some time; 51 % of women breastfed the newborn within the first postpartum

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hour; the prevalence of EBF in children younger than six months was 30.8 %; BF mean duration was 10.9 months; 66.4 % of children younger than two years used a bottle on the previous day; and only 39 % received age-appropriate breastfeeding.⁵ The consequences associated with these figures represent challenges for public policies. This document aims to contribute elements for social discussion on nurturance, reproduction and health services, and to promote a dialogue between the academy and medical practice.

Anthropometry deficiencies

The first clinical deficiency was identified in the acquisition, recording and interpretation of children's anthropometry, which basically refers to age, gender, weight and length of babies, and which is related to nutritional diagnosis and infant growth. There are no standardized procedures to carry out measurements.⁶ Gender is assigned at birth. Age is asked by doctors on repeated occasions. Generally, measurements were carried out by nursing staff prior to consultation. Babies were weighed naked or dressed, even with blankets and shoes; on an appropriate scale, or held by the mother on an adult scale, with her weight being subtracted to obtain the baby's weight. Only one office had an infantometer, which is the instrument to measure length; height was measured with a flexible measuring tape running across the baby's body, on the examination table, in parallel to a measuring tape placed on the handrail; head and foot pieces could have been used or not. It was common for the figures not to be written down immediately and for numerical mistakes to be made.

Several doctors showed difficulty to understand the scope and relationship of infant nutritional status indicators: weight-for-age, weight-for-length and length-for-age. As reference, some doctors used the Control of the Healthy Child program charts, others, a processed food poster (Gerber®, Nestlé), others, their own parameters, with a few more declaring themselves incompetent for interpreting the information.

During the observation period, the World Health Organization anthropometric standards arrived at the health center. No presentation or training took place. It was assumed that everyone knew how anthropometry is carried out and that it was correctly performed; however serious deficiencies in its quality and scope were observed.

Table 1. Infant feeding modalities in 20 cases

Modality	Cases (n)
Exclusive breastfeeding	6
Breastfeeding and water	2
Breastfeeding and formula	4
Breastfeeding and varied feeding	3
Breastfeeding, formula and varied feeding	2
Formula and varied feeding	3
Total	20

Identification of feeding modalities

The other clinical deficiency concerns infant feeding modalities identification. In medical consultations, doctors asked the mothers what did the baby eat or something similar. On two occasions, the doctor did not ask and only prescribed the nutritional model to follow. With the maternal answers, the *consultation modality* was defined for each case.

In post-consultation interviews, the mothers were asked what the baby had eaten the day before, and the *interview modality* was designated. At least six infant feeding modalities were identified (Table 1). When the consultation modality was compared with the interview modality, a level of agreement of 50 % was found (Table 2). This level of accuracy is not sufficient to understand the feeding patterns in all their dimension or to clinically address BF.¹

Infant formulas were used since hospital stay for delivery care, as observed in cases 1 and 2. EBF was concentrated in the group of up to 10 weeks of age; thereafter, the modalities were diversified up to a varied diet, mostly with BF and formula. Of the 20 mothers, 17 offered BF, two more had tried for two months, but on the day of the interview they were no longer breastfeeding; in addition, a premature infant was never breastfed. That is, 19 of the 20 mothers did breastfed; six of them had succeeded with EBF on the consultation day; two more, in combination with water, and nine more combined BF with infant formula and various foods. Medical accuracy to identify infant feeding modalities was low.

Discussion

At each consultation, infant feeding and nutrition was discussed. Anthropometric data are always

Table 2. Infant feeding modalities. Agreement between data obtained in consultation and maternal interview

Case	Age (weeks)	Modality		Agreement
		Consultation	Interview	
1	3 days	EBF	BF + F	No
2	12 days	EBF	BF + F + W	No
3	13 days	EBF	EBF	Yes
4	4	EBF	EBF	Yes
5	4	BF + F	BF + F	Yes
6	4	EBF	BF + W	No
7	5	EBF	EBF	Yes
8	7	BF + F*	BF + F	Yes
9	8	BF + F *	BF + W	No
10	8	EBF	EBF	Yes
11	8	EBF	EBF	Yes
12	9	BF + F	F + tea + oral rehydration solution + W	No
13	10	EBF	EBF	Yes
14	13	BF + F	BF + F + W + tea	No
15	14	BF + whole milk + oatmeal	BF + whole milk + oatmeal + tea + W	No
16	14	BF + F	BF + F	Yes
17	22	F + tea + W	F + tea + W + commercial baby food + banana	No
18	22	F + apple + banana	F + fruit + vegetables + W	No
19	23	BF + F + chicken broth + rice + chayote + carrot + zucchini + potato + banana + apple + pear + W	BF + F + chicken broth + rice + chayote + carrot + zucchini + potato + banana + apple + pear + W	Yes
20	24**	BF + guava + mango + baby food	BF + carrot + W + tea	No

BF = breastfeeding, EBF = exclusive breastfeeding, W = water, F = formula.

*Doctor-prescribed.

**With moderate malnutrition.

present and are essential. Anthropometry quality was poor, and medical personnel capability to diagnose the nutritional status was limited, which deserves health authorities' attention.

The medical question "what does the baby eat?" is routine and superficial. In two cases, it was not formulated. Infant feeding modalities descriptive accuracy indicates that doctors do not ask the relevant questions. Case 2 illustrates that the question has an answer, but the feeding modality is not described: the doctor asked the mother if she had been breastfeeding, and she answered affirmatively; actually, the modality was BF, formula and foods at the baby's 12th day of life; however, the doctor assumed that the feeding modality was EBF.

Few physicians clarify the relationship between breast milk demand and production, or how to achieve a good latch between a suckling baby and a mother who produces and offers milk through breastfeeding. Case 8, of seven weeks of age, is extreme: on one hand, the doctor instructed the mother to feed the baby exclusively on breast milk until four months of age, but on the other, he indicated that if she wasn't producing enough breast milk, she could feed the baby with formula.

There are arguments to substantiate the existence of serious problems in the scope of medical practices and prescriptions about infant feeding, which require a review in light of current knowledge and international consensuses. The problems that were identified reflect archaic, medicalized and insufficient notions

about infant feeding for offering counseling to the population that attends postnatal consultations, which can be considerably improved with information, training and political will.

The situation in Mexico is the result of medical, social and family practices based on the “culture of bottle-feeding”, which is referred to by the Innocenti Declaration and that must be recognized and described in order to oppose arguments in favor of a “culture of breastfeeding”.⁷ Regarding the daily decisions that infant feeding practices entail, mothers interact with health services, where recommendations on medicalized dietary normativity are expressed. We can argue that great ignorance prevails regarding BF conditions and requirements, particularly in its exclusive modality, and the guidance to carry it out. The World Health Organization has high-impact training models.⁸ Some time ago, the General Hospital of Mexico operated a BF training center, which could be a precedent for nation-wide actions.

Necessary note

In this text, the term *doctor* is used without gender distinction, in the sense of describing the professional function at medical consultation, rather than in the sense of naming the subject, male or female, who exercises it. Something similar occurs with the term baby.

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Conflict of interests

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