SCIENTIFIC LETTER

Factors associated with longer breastfeeding duration in Mexican working mothers

Factores asociados con mayor duración de la lactancia materna en madres trabajadoras mexicanas

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Introduction

Mothers who work outside the home, represent a risk group associated with early weaning.\textsuperscript{1} When they return early to work after birth, they have higher probability of giving up breastfeeding prematurely.\textsuperscript{2} Even when such mothers wish to continue breastfeeding, they face work-related obstacles that hinder exclusive breastfeeding for the first six months, as well as supplementary breastfeeding later.\textsuperscript{3} Opportunities for breastfeeding can be limited by the type of position held,\textsuperscript{4} the availability of lactation rooms,\textsuperscript{4} the right of a 1-h breaktime to express milk,\textsuperscript{5} and perceived lack of support from managers and coworkers.\textsuperscript{6} Therefore, the objective of the study was to identify factors associated with breastfeeding duration in Mexican working mothers.

Methods

An analytical cross-sectional study was carried out in 2018 in mothers who worked in Guadalajara, Mexico. The Research, Research Ethics, and Biosafety Committees of the University of Guadalajara (CI-05918) approved the study. We selected institutions of three predominant economic activities in the city with > 250 employees: governmental; manufacturing industry; and health and social assistance service. The human resources departments, of those companies which agreed to participate, helped us to contact mothers from 6 to 35 months postpartum. The inclusion criteria were: to work in the same institution since delivery, single full-term pregnancy, and apparent good health. Mothers with impediments to proper breastfeeding were excluded. We asked them to sign the written informed consent form if they agreed to participate; mothers who did not breastfeed were also included.

Statistical analysis

We performed a binomial logistic regression on those variables that were significantly associated with breastfeeding duration (p < 0.05), following the forward method to identify the most important variables in the prediction model.

Ethical considerations

The study adhered to the guidelines of the Declaration of Helsinki in its last correction, which was made during the 64th Annual Assembly of the World Medical Association (2013). The Research, Research Ethics, and Biosafety...
Committees of the Health Sciences University Center of the University of Guadalajara (CI-05918) approved the study.

Results

One hundred fifty-eight mothers from 25 institutions participated. The mean maternal age was 33.1 ± 4.8 years, while the median age of the infants was 18 months (25th–75th percentiles: 12–26 months). The median breastfeeding duration was 6 months (25th–75th percentiles: 3–11 months). Ninety-two women (58.2%) provided ≥ 6 months of breastfeeding. Low milk production and workload were the most frequently mentioned reasons for breastfeeding cessation.

Fifty-two variables were analyzed, of which 21 had a significant association with breastfeeding duration: 18 were associated with a breastfeeding duration of ≥6 months, and three with a duration less than 6 months. Most of the variables associated with a breastfeeding duration of ≥6 months involved work-related factors or support from the social environment. The perception of low milk production, a flat or inverted nipple shape, and a favorable attitude towards human milk substitutes were significantly associated with a shorter breastfeeding duration. Four variables were significant in the logistic regression, this model explained 65.4% of the probability of a breastfeeding duration ≥6 months (Table 1).

Discussion

This study revealed the current breastfeeding behavior of mothers employed in institutions that by law must follow measures to protect this practice during the workday (the right to breastfeeding hour and installing lactation rooms where mothers can express milk and/or breastfeed). Moreover, we included variables that have previously shown a significant association with breastfeeding duration. In conclusion, breastfeeding is influenced by various factors. The increase in the number of women in the workforce makes it difficult for women to stay with their children during breastfeeding and encourages them to give up prematurely. When mothers have a lactation room in their workplace, they often express milk one or more times during their workday; they tend not to perceive low milk production, and they plan to breastfeed for more than six months predicts 65.4% of the probability of breastfeeding for six months or more.

Conflict of interest

None.

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References

1. Guendelman S, Kosa JL, Pearl M, Graham S, Goodman J, Kharrazi M. Juggling work and breastfeeding: effects of maternity leave and occupational characteristics. Pediatrics. 2009;123:e38–46, http://dx.doi.org/10.1542/peds.2008-2244.
2. Navarro-Estrella M, Duque-López MX, Trejo y Pérez JA. Factors associated with short duration of breast-feeding in Mexican working women [Factores que influyen en el abandono temprano de la lactancia por mujeres trabajadoras]. Salud Publica Mex. 2003;45:276-84. Spanish.
3. Kimbro RT. On-the-job moms: work and breastfeeding initiation and duration for a sample of low-income women. Matern Child Health J. 2006;10:19–26, http://dx.doi.org/10.1007/s10810-005-0058-7.
4. Tsai SY. Impact of a breastfeeding-friendly workplace on an employed mother’s intention to continue breastfeeding after returning to work. Breastfeed Med. 2013;8:210-6, http://dx.doi.org/10.1089/bfm.2012.0119.
5. Heymann J, Raub A, Earle A. Breastfeeding policy: a globally comparative analysis. Bull World Health Organ. 2013;91:398-406, http://dx.doi.org/10.2471/BLT.12.109363.
6. Thui ler D, Mercer J. Variables associated with breastfeeding duration. J Obstet Gynecol Neonatal Nurs. 2009;38:259–68, http://dx.doi.org/10.1111/j.1552-6909.2009.01021.x.