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# Influence of Expert Counselling and Social Media Support on Exclusive Breastfeeding among Generations in an Emergent Country

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**Abstract**

**Purpose**: To describe the prevalence and factors associated with exclusive breastfeeding at six months, especially those associated with age related generations.

**Methods:** Data were analyzed from 1599 mothers of three different generations (X, Y and Z), who responded a self-administered questionnaire when breastfeeding stopped. Multiple logistic regression was used to evaluate the association between reasons for discontinuing and the probability of mothers meeting six breastfeeding duration.

**Results:** The percentage of exclusive breastfeeding at six months of mothers under 18 years old was 37.7% compared to millenians 59.9% and X generation mothers 76.6% ($p<0.05$). In the multivariate analysis we only found statistical association with profesional breastfeeding counseling (OR: 1.82, 95% CI: 1.33 - 2.43, p=0.003) and belong to a social media supportive group (OR: 1.61, 95% CI: 1.01 – 2.55, p=0.042).

**Conclusion:** Education from professional providers and social media support may be necessary to address troubleshooting breastfeeding issues without regard to age or generation.

**Keywords:** Breastfeeding; Expert counselling; Social media support; Lactation counseling; Age related generations

## Introduction

The benefits of breastfeeding for both infant and mother are well documented. It has been demonstrated to reduce the frequency of respiratory tract infections [1], asthma [2], diarrhea [3], gastrointestinal disease [4], obesity, type 1, 2 and gestational diabetes [5,6]. It has also been observed reduction in frequency of inflammatory bowel disease, celiac disease, and provides beneficial effects on neurodevelopment of children as well as a reductive effect on blood lipids levels in adulthood [7]. Deaths of an estimated 820,000 children under the age of five could be prevented globally every year with increased breastfeeding [8].

Breastfeeding has been shown to promotes bonding and reduce crying [9], and improved performance in intelligence tests [10], in part mediated through subcortical gray volumen [11]. Benefits for the mother include reduced risk of breast and ovarian cancer, lower risk of mothers type 2 diabetes, delays the return of menstruation and fertility and lower risk of postpartum depression [12]. Current recommendations state that: "for the majority of infants, the introduction of solid foods should be delayed until 6 months of age, and up until this age exclusive human milk offers optimal nutrition" [13], in a dose–response relationship [14,15].

Many factors are associated with the likelihood of mothers' unsuccessfully initiating and discontinuing breastfeeding, including low level of education, low socio-economic status, mother's young age, be primiparous, sore nipples, perception of "not have enough milk", Illness or need to take medicine, breast infected or abscessed, a Physician concerned about infant weight gain, unhelpful nurses or hospital information, premature start of complementary feeding, having two or more brothers, be single, having mutual decision of parents on exclusive breast feeding, fathers age, mothers occupation, maternal affection conditions (maternal motivation), depression, early return to work caesarean section and low milk supply, delayed onset of lactogenesis, high body mass index, women whos smoked during pregnancy, feelings of maternal conflict, guilt and finally having no perceived support system or advice from peer group or voluntary organizations [16-23].

In spite of passionate promotion of the benefits, irrefutable bench research, revealing population-based/epidemiologic analyses, and impressive financial modeling, breastfeeding initiation, duration and exclusivity rates are poor, with a frequency of abandonment after 6 months of 65% to 86% [24,25]. According to the data available from the CDC approximately half of U.S. babies born were receiving human milk at 6 months and only one third were exclusively breastfed. Is it a lost cause? Are we trying too hard? Or are we just not trying the right way?

Generation Y, America's largest generation, born from 1981 to 1999 accounted for 82% of U.S. births in 2016, has distinctive characteristics: they're always online and "connected". They prefer to communicate more quickly and effectively via email, social networks or text messaging as opposed to traditional means of communication.

"Their most trusted sources, and resources, are their friends, not just as we traditionally define them, but also as they have redefined them: as the people and organizations within their online, social media networks" [26].

Generation Y parents, the ones we mostly want to hear our message

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about the importance of breastfeeding – since Z generation parents are still so little - need to be informed and maybe the one of the most important ways to do that is through social media. Nevertheless, although some researchers have evaluated the impact of social media assistance (SMS) for other diseases [27], very little have evaluated the effects of social media in providing information and support to breastfeeding mothers [28,29]. The purpose of our study was to explore if there is a current change in frequency of exclusive breastfeeding and the reasons why women stop and their association with age-generation.

## Methods

### Design

Prospective cross-sectional study.

### Setting

San Luis Potosí, an urban city of México, June 2017-May 2018.

### Sample

Target population were mothers whose children were three years old or less, that had currently suspended the breastfeeding, and the simple population were those attending private and institutional medicine included if they had single infant, any route, any age and with normal intellectual abilities. Women were excluded if they had any condition that prevented them from answering the survey questions or if they had any contraindications to breastfeeding. We had a non-probabilistic, intentional sample. The size of the sample was calculated based on the number of variables included in the multivariate analysis. The calculated minimum sample size was 1,600 (16 degrees of freedom) [30].

### Data collection

A self-administered questionnaire was given to the mothers for completion, on the main factors that have been demonstrated to determine the suspension of breastfeeding incluiding the use of social networks or other communication technologies; in addition, it was questioned about those factors that the consideration of the participants determined their progression or suspension of breastfeeding. The socio-economic status was determined based on the level of studies, place of origin, site of delivery and occupation of the mother [31].

They were informed about the aim of the research and required to sign voluntary an informed consent agreement also It was assured their right to refuse to participate, according to the ethics committee, Hospital Central Dr. Inacio Morones Prieto, San Luis Potosi, and Helsinki declaration 2017.

Reliability was assessed by test-retest in 50 volunteers. They were assessed and retest 2 weeks later. They get the same category scores test-retest 91% to 93% (p=0.01) of the time. The weighted kappa was 0.81-0.87 (p=0.001).

### Data analysis

Data were analyzed using STATA 13.0. statistical software package. Student t test or Mann Whitney U test and Chi square test analysis was used to determine the association between exclusive lactancy at 6 months and the 14 variables shown in Table 1. Then the significantly associated variables ($p<0.05$, two tailed) were into the multivariate analysis. Multiple logistic regression was used to screen for independent variables potentially associated with exclusive breastfeeding at least 6 months of infant life, while adjusting for the other confounders.

## Results

All 1,599 women gave birth to a live infant between may 1, 2015 and January 31, 2018, with age between 16 and 45 years: 53 mothers 3.3 %, under 18 years (Z generation); 269 (16.8 %) over 37 years, X generation and 1277 (79.8 %) millenian generation. One fifth of women were single mothers and 90.9% came from urban enviroment.

The average duration of exclusive lactancy was 7.47 months (0 to 30 m, 95% CI=1-18 months); nevertheless in the group of women under the age of 18 the percentage of exclusive breastfeeding at six months was 37.7% compared to millenians and X generation mothers (58.96% and 71%, $p<0.05$).

The majority of the mothers' educational level was up to college, followed by high school 25.6% and less than 24% only elementary or middle school. Almost half of the mothers had 1 or 2 children. Their usual occupation were home duties 25%, study 22% and work 53%. The delivery was attended predominantly in a private hospital accordding with the socioeconomic status of the women included.

Mothers nursed their neonates during the first 24 hours after birth in 68.4% of the cases. The weaning process begins at about 6 months (95% IC: 4-10 m). Only one third of the women belong to a social media supportive group in platforms such as Facebook (99%).

Lactancy guidance support was offered in 1,258 women: 64% by a nurse or a physician and 29.8% by a trained person, face to face, tailored to her needs and delivered through the antenatal and postnatal period. The remaining percentage by a friend or a family member.

The most frequent reasons reported for discontinuation of breastfeeding in the first month were "sore nipples" (26.4%) and "not enough mother´s milk" (25.3%); From one to six months: "not enough mother´s milk" (21.5%) and "unable to find child care facilities at or near the school or workplace" (15%); and those that breastfeeding lasted more than six months: "planned to stop breast feeding at this time" (respectful weaning) 29.5% and "medical advice" 11.6%.

Among those inluded in this study, we analyzed the reasons mothers stopped breastfeeding within the first month postpartum, one to six months, and breastfed for at least six months (Table 1). Almost all of the maternal and infant characteristics included in the analysis were associated with breastfeeding duration. Women under 18 years were less likely to stop breastfeeding in the first six months of the infant life (62%), than millenial women (34%) and older than 37 years old (28%).

We found no significantly difference in the frequency of exclusive breastfeeding at six months according to the onset of lactation or weaning; however, women who fed their babies for 6 months or more had 20% more days of maternity leave lenght to those who fed less than 6 months (p=0.01).

Table 2 shows the sociodemographic variables significatively associated to different generation groups (millenial, Z and X generations). Main differences are shown related to age, and include parity, marital status, vaginal or abdominal delivery and educational stage. However, assessment by a lactancy expert was offered thrice as frequently to women from generations X and Y (24% each one), when compared to those from generation Z (8%, p=0.001). In contrast, in 73.5% of the women from generation Z the assessment was provided by a physician or a nurse.

| | <1 month n (%) | 1-6 month n (%) | >6 months n (%) | *p* value |
|---|---|---|---|---|
| **Maternal age (years)** | | | | |
| <18 (n=53) | 0 (0) | 33 (62.2) | 20 (37.3) | 0.001 |
| 18-37 (n=1277) | 87 (6.81) | 439 (34.7) | 753 (58.96) | |
| >37 (n=269) | 0 (0) | 78 (28.99) | 191 (71.01) | |
| **Parity** | | | | |
| One (n=841) | 76 (9.04) | 283 (33.65) | 482 (57.31) | 0.001 |
| two (n=523) | 11 (2.10) | 184 (35.18) | 328 (67.72) | |
| three or more (n=235) | 0 (0) | 81(34.40) | 154 (65.60) | |
| **Marital status** | | | | |
| Single (n=276) | 14 (5.07) | 125 (45.29) | 137 (49.64) | 0.001 |
| Married (n=1323) | 73 (5.52) | 423(31.97) | 827(62.51) | |
| **Mode of delivery** | | | | |
| Vaginal (n=789) | 45 (5.70) | 257 (32.57) | 487 (61.73) | 0.36 |
| cesarean (n=810) | 42 (5.19) | 291 (35.92) | 477 (58.88) | |
| **Infant sex** | | | | |
| Female (n=780) | 49 (6.28) | 254 (32.56) | 477 (61.15) | 0.17 |
| Male (n=819) | 38 (4.64) | 294 (35.89) | 487 (59.46) | |
| **Residency** | | | | |
| Urban (n= 1479) | 82 (5.54) | 515 (34.82) | 882 (59.63) | 0.374 |
| Rural (n=120) | 5 (4.16) | 33 (27.50) | 82 (68.34) | |
| **Socioeconomic status** | | | | |
| Low (n=594) | 61 (10.26) | 195 (32.83) | 338(56.91) | 0.001 |
| medium (n=685) | 14 (2.04) | 190 (27.73) | 481(70.23) | |
| medium-high (n=200) | 0 (0) | 97 (48.50) | 103 (51.50) | |
| High (n=120) | 12 (10) | 66 (55) | 42 (35) | |
| **Maternal education level** | | | | |
| Elementary (n=72) | 0 (0) | 24 (33.33) | 48 (66.67) | 0.001 |
| Middle school (n=302) | 20 (6.62) | 132 (43.71) | 150 (49.67) | |
| High school (n=409) | 32(7.82) | 130 (31.78) | 247(60.39) | |
| College (n=779) | 35(4.49) | 242 (31.19) | 502 (64.31) | |
| Postgrade (n=37) | 0 (0) | 20 (54.05) | 17 (45.95) | |
| **Maternal occupation** | | | | |
| Home duties (n=392) | 8 (2.04)) | 131 (33.42) | 253 (64.54) | 0.001 |
| Work (n=848) | 44 (5.19) | 304 (35.85) | 500 (58.96) | |
| Student (n=359) | 35 (9.75) | 113 (31.48) | 211 (58.77) | |
| **Lactancy education** | | | | |
| No (n=341) | 22 (6.45) | 122 (35.78) | 197 (57.77) | 0.0001 |
| Physician/Nurse (n=805) | 59 (7.32) | 332 (41.24) | 414 (51.42) | |
| Friend/familiar (n=77) | 0 (0) | 27 (35.06) | 50 (64.93) | |
| L. consultant ( n=376) | 6 (1.59) | 67 (17.81) | 303 (80.58) | |
| **Support social media group** | | | | |
| No (n=1,012) | 77 (7.61) | 407( (40.22) | 528 (52.77) | 0.001 |
| Yes (n=587) | 10 (1.70) | 141(24.02) | 436 (74.28) | |
| **TOTAL** | 87 | 548 | 964 | |

**Table 1:** Duration of any breastfeeding according to maternal and infant characteristics (N=1,599).

Additionaly, social media support was provided in 5.66% of women from generation Z, 32.18% from generation Y, and 64.31% from generation X, which was associated with exclusive breastfeeding at 6 months or older.

Finally, we observed that the main cause of exclusive breastfeeding interruption in generation-Z women was insufficient supply (24.53%), followed by "new pregnancy" (22.6%) and imposibility to breastfeed during working hours (15.09%), in contrast with generations Y and Z, where the most frequent reason was «respectful weaning»: 16.7% and 37.8% respectively, that correlates with breastfeeding duration. The second most frequent cause for generation-Y was "imposibility to breastfeed during working hours" and in generation-X it was "insufficient supply". We found no significantly difference in the frequency of exclusive breastfeeding at six months according to the onset of lactation or weaning.

In the multivariate logistic regression analysis we only found statistical association between breastfeeding up to six months and breastfeeding support (OR: 1.82, 95% CI: 1.33 - 2.43, p=0.003) and belong to a social media supportive group (OR: 1.61, 95% CI: 1.01 – 2.55, p=0.042), p<0.001, model $R^2$= 63.2.

| | Z Generation (<18 y) n (%) | Y Generation (18-37 y) n (%) | X Generation (> 37 y) n (%) | *p* value |
|---|---|---|---|---|
| **Parity** | | | | |
| One (n=841) | 50 (5.94) | 690 (82.04) | 101 (12.02) | 0.001 |
| two (n=523) | 3 (0.58) | 421 (80.49) | 99 (18.93) | |
| three or more (n=235) | 0 (0) | 166 (70.63) | 69 (29.37) | |
| **Marital status** | | | | |
| Single (n=276) | 27 (9.78) | 231(83.70) | 18 (6.52) | 0.001 |
| Married (n=1323) | 26 (1.97) | 1046 (79.06) | 251 (18.97) | |
| Mode of delivery | | | | |
| Vaginal delivery (n=789) | 46 (5.83) | 568 (71.99) | 175 (22.18) | 0.001 |
| Cesarean (n=810) | 7 (0.86) | 709 (87.54) | 94 (11.60) | |
| **Maternal education level** | | | | |
| Elementary school (n=72) | 6 (0) | 33 (33.33) | 33 (66.67) | 0.001 |
| Middle school (n=302) | 6 (6.62) | 281 (43.71) | 15 (49.67) | |
| High school (n=409) | 41(10.03) | 368(89.97) | 0 (0) | |
| College (n=779) | 0 (0) | 558(71.63) | 221 (28.37) | |
| Postgrade (n=37) | 0 (0) | 37 (100) | 0 (0) | |
| **Maternal occupation** | | | | |
| Home duties (n=392) | 36 (9.18) | 215 (31.48) | 141 (58.77) | 0.001 |
| Work (n=848) | 14 (1.65) | 762 (81.42) | 72 (16.94) | |
| Student (n=359) | 3 (0.84) | 300 (83.57) | 56 (15.60) | |
| **Lactancy education** | | | | |
| No (n=341) | 11 (3.23) | 211 (61.88) | 119 (34.90) | 0.001 |
| Physician/Nurse (n=805) | 39 (4.84) | 717 (89.06) | 49 (6.08) | |
| Friend or family (n=77) | 0 (0) | 42 (54.54) | 35 (45.45) | |
| L. consultant (n=376) | 3 (1.59) | 307 (81.6) | 66 (17.55) | |
| **Support social media group** | | | | |
| No (n=1,012) | 50 (4.94) | 796 (85.57) | 166 (9.49) | 0.001 |
| Yes (n=587) | 3 (0.51) | 141481 (81.94) | 103 (17.54) | |
| **TOTAL** | 53 | 1277 | 269 | |

**Table 2:** Sociodemographic variables of lactating women categorized by age generation (N=1,599).

## Discussion

The purpose of our study was to asses actual factors associated with discontinuation of breastfeeding at 6 months of infant´s life. Knowing these factors will allows health-care providers to identify early barriers to help mothers breastfeed successfully.

At 6 months after birth, we had a high frequency of breastfeeding (60 percent), similar to what was reported in Japan and Taiwan [32]. Like other studies, significant asociations were found [5,11,18], specially those related with women´s age or generation, like parity, socio-economic status, education level, occupation or married status; however other influencing factors must be considered, since we found no difference in breastfeeding duration between women of X generation and Y, as was to be expected.

The multivariate analyses of our study illustrate that assesment by a trained lactation consultant and/or social media support have the stronger effects on lactation time, not associated with age or generation; In fact, older women unexpectedly had similar frequency of belonging to an online support group (about 40%). Maybe the "ageless" generation.

Regardless of the factors associated frequently with early interruption of breastfeeding the solution is maybe more and better education and support. Mothers need to be aware of the fact that breastfeeding can be a challenge, that takes time and the problems can be frequently but are manageable. Breastfeeding education [33,34] must be individualized in such a way as to ensure that leading reasons for suspension of breastfeeding (breast problems, perceived insufficient milk or other activities), can be avoided.

In fact, breastfeeding cessation even before hospital discharge has been associated to ineffective support [35,36], and single women are less likely to continue breastfeeding than married women and women with a partner, as the presence of a support environment, is one of the most influencing factors for women choosing to initiate and to continue breastfeeding [37,38].

Women who currently do not have adequate support and/or information, report seeking support and assistance from their peers. This kind of support is not a new concept in breastfeeding assistance. Many woman reported heavy reliance on peer support via social media networks - predominantly Facebook. The most real advantage is real-time help and reassurance. Multiple mothers described their experience attempting to feed a restless and irritability infant in the middle of the night. A Facebook or twitter post to a breastfeeding support page generally garnered immediate responses from other mothers who would offer advice or compassion [39,40].

In accordance with the data, we emphasized the value of "La Leche League" (LLL) face to face meetings, particularly the opportunity they have created to listenining the experience of mothers who had overcome difficulties. In a recent research, duration of breastfeeding were improved by implementing routine lactation consultation into the first postpartum visit [41].

It has been recommended for perinatal educators and other members of the health-care team to recognize women at "risk" and provide individualized information to promote successful breastfeeding. Physicians and perinatal educators may be in a unique position to encourage new mothers to join a supportive group and an experienced lactation consultant [21], to screen and prevent early cessation of breastfeeding, avoiding problems and breastfeed for longer periods [42]. Common causes for breastfeeding discontinuation can be anticipated and interventions can be opportunely initiated according to our study, no matter the age or generation.

Social network sites can provide specially support from a trusted community, it is immediate, it complements previous support. Even thought the physician or the grandmother are the most positive figures contributed to exclusive breast-feeding, they are also the most influential in its interruption, as we can see in the present study and others [42,43]. It is an important vehicle to spread feeding information, as it become apparent as a highly frequent source of support among women facing breastfeeding problems, without regard to generation, ethnics or country; however, they currently are not using their full potential [28].

The United States Breastfeeding Committee (USBC) is joining the U.S. Surgeon General in calling to create an "environment that empowers and supports all women to achieve their personal breastfeeding goals". Information can guide groups on social networks to give an effective support [44,45].

Our study had limitations that should be considered. The primary limitation was the lack of some possible associated variables like: domestic violence, body mass index, desired breastfeeding, ethnic status, mutual decision among parents and insurance status among others. Recall bias on our results is to a certain extent minimized since most of the variables included contain current elements that are difficult to modify or forget like a mode of delivery, infant sex or marital status. Nevertheless, our study is hypothesis generator and more research is needed to analyze interventions that will help to reduce breastfeeding cessation, as well as identify what supports are needed to improve women's experience of breastfeeding.

## Conclusion

Although the reasons and sociodemographic variables traditionally shown in the studies are still being reported, the education level of professional providers and social media support are associated with a greater frequency of exclusive breastfeeding at 6 months of age, which indicates that the initially considered factors can be overcome through the use of these tools to toubleshoot breastfeeding issues without regard of age or generation.

## References

1. Duijts L, Jaddoe V, Hofman A, Moll H (2010) Prolonged and exclusive breastfeeding reduces the risk of infectious diseases in infancy. Pediatrics 126: e18-e25.
2. Oddy WH (2017) Breastfeeding, childhood asthma, and allergic disease. Ann Nutr Metabol 70: 26-36.
3. Takahashi K, Ganchimeg T, Ota E, Vogel JP, Souza JP, et al. (2017) Prevalence of early initiation of breastfeeding and determinants of delayed initiation of breastfeeding: secondary analysis of the WHO Global Survey. Sci Rep 7: 44868.
4. Henrick B, Yao X, Nasser L, Roozrogousheh A, Rosenthal KL (2017) Breastfeeding behaviors and the innate immune system of human milk: working together to protect infants against inflammation, HIV-1, and other infections. Front Immunol 8: 1631.
5. Olson J, Hayward M (2017) Breastfeeding, overweight status, and inflammation. Soc Sci Res 64: 226-236.
6. Much D, Beyerlein A, Roßbauer M, Hummel S, Ziegler A (2014) Beneficial effects of breastfeeding in women with gestational diabetes mellitus. Mol Metab 3: 284-292.
7. Hörnell A, Lagström H, Lande B, Thorsdottir I (2013) Breastfeeding, introduction of other foods and effects on health: a systematic literature review for the 5th Nordic Nutrition Recommendations. Food Nutr Res 57: 20823.
8. Victora CG, Bahl R, Barros AJ, França GV, Horton S, et al. (2016) Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet 387: 475-490.
9. Anderson GC, Moore E, Hepworth J, Bergman N (2003) Early skin-to-skin contact for mothers and their healthy newborn infants. Cochrane Database Syst Rev 2: CD003519.
10. Kanazawa S (2015) Breastfeeding is positively associated with child intelligence even net of parental IQ. Dev Psychol 51: 1683-1689.
11. Luby JL, Belden AC, Whalen D, Harms MP, Barch DM (2016) Breastfeeding and childhood IQ: the mediating role of gray matter volume. J Am Acad Child Adolesc Psychiatry 55: 367-375.
12. Chowdhury R, Sinha B, Sankar MJ (2015) Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. Acta Paediatr 104: 96-113.
13. Carletti C, Pani P, Monasta L, Knowles A, Cattaneo A (2017) Introduction of complementary foods in a cohort of infants in Northeast Italy: Do parents comply with WHO recommendations? Nutrients 9: 34.
14. Dieterich CM, Felice JP, O'Sullivan E, Rasmussen KM (2013) Breastfeeding and health outcomes for the mother-infant dyad. Pediatr clin North Am 60: 31-48.
15. Aakko J, Kumar H, Rautava S, Wise A, Autran C, et al. (2017) Human milk oligosaccharide categories define the microbiota composition in human colostrum. Benef Microbes 8: 563-567.
16. Draman N, Mohamad N, Yusoff, Muhamad R (2017) The decision of breastfeeding practices among parents attending primary health care facilities in suburban Malaysia. J Taibah Univ Med Sci 12: 412-417.
17. Mangrio E, Persson K, Bramhagen AC (2017) Sociodemographic, physical, mental and social factors in the cessation of breastfeeding before 6 months: a systematic review. Scand J Caring Sci 1: 1-15.
18. Brown A, Davies R (2014) Fathers' experiences of supporting breastfeeding: challenges for breastfeeding promotion and education. Matern Child Nutr 10: 510-526.
19. Taveras EM, Capra AM, Braveman PA, Jensvold NG, Escobar GJ, et al. (2003) Clinician support and psychosocial risk factors associated with breastfeeding discontinuation. Pediatrics 112: 108-115.
20. Odom EC, Li R, Scanlon KS, Perrine CG, Grummer-Strawn L (2013) Reasons for earlier than desired cessation of breastfeeding. Pediatrics 131: e726-e732.
21. Radzyminski S, Callister L (2016) Mother's beliefs, attitudes, and decision making related to infant feeding choices. J Perinat Educ 25: 18-28.
22. Martínez-Plascencia U, Rangel-Flores Y, Rodríguez-Martinez M (2017) ¿Lactancia materna o en pareja? Un estudio sobre las experiencias de reconfiguración de cuerpos, roles y cotidianeidades en madres y padres mexicanos. Cad Saúde Pública 33: e00109616.
23. Khasawneh W, Khasawneh A (2017) Predictors and barriers to breastfeeding in north of Jordan: could we do better? Int Breastfeed J 12: 49.
24. De Jersey SJ, Mallan K, Forster J, Daniels LA (2017) A prospective study of breastfeeding intentions of healthy weight and overweight women as predictors of breastfeeding outcomes. Midwifery 53: 20-27.
25. Pang WW, Aris IM, Fok D, Soh SE, Chua MC, et al. (2016) Determinants of breastfeeding practices and success in a multi-ethnic Asian population. Birth 3: 68-77.
26. Wolynn T (2012) Using social media to promote and support breastfeeding. Breastfeed Med 7: 364-365.
27. Bender JL, Jimenez-Marroquin MC, Jadad AR (2011) Seeking support on facebook: a content analysis of breast cancer groups. J Med Internet Res 13: e16.

28. Asiodu IV, Waters CM, Dailey DE, Lee KA, Lyndon A (2015) Breastfeeding and use of social media among first-time African American mothers. J Obstet Gynecol Neonatal Nurs 44: 268-278.

29. Souza M, Nespoli A, Zeitoune R, Célia G (2016) Influence of the social network on the breastfeeding process: a phenomenological study. Esc Anna Nery 20: e20160107.

30. Katz MH (2003) Multivariable analysis: a primer for readers of medical research. Ann Intern Med 138: 644-650.

31. Braveman P, Cubbin C Egerter S (2005) Socioeconomic status in health research: one size does not fit all. JAMA 294: 2879-2888.

32. Yorifuji T, Kubo T, Yamakawa M, Kato T, Inoue S, et al. (2014) Breastfeeding and behavioral development: a nationwide longitudinal survey in Japan. J Pediatr 164: 1019-1025.

33. Lou Z, Zeng G, Huang L, Wang Y, Zhou L, et al. (2014) Maternal reported indicators and causes of insufficient milk supply. J Hum Lact 30: 466-473.

34. Burgio M, Laganà A, Sicilia A, Prosperi Porta R, Porpora M, et al. (2016) Breastfeeding education: where are we going? A systematic review article. Iranian J Pub Health 45: 970-977.

35. Johnson AM, Kirk R, Rooks AJ, Muzik M (2016) Enhancing breastfeeding through healthcare support: results from a focus group study of African American mothers. Matern Child Health J 20: 92-102.

36. Gual A, Boscardini L, Visentin R, Angellotti P, Grugni L, et al. (2017) Skin-to-skin contact in cesarean birth and duration of breastfeeding: a cohort study. Scientific World J 2017: 1940756.

37. Hannula L, Kaunonen M, Tarkka M (2008) A systematic review of professional support interventions for breastfeeding. J Clin Nurs 17: 1132-1143.

38. Patnode CD, Henninger ML, Senger CA, Perdue LA, Whitlock EP (2016) Primary care interventions to support breastfeeding: updated systematic review for the U.S. Preventive Services Task Force. JAMA 316: 1694-1705.

39. Marques E, Cotta R, Botelho M, Franceschini S, Araújo R, et al. (2010) Rede social: desvendando a teia de relações interpessoais da nutriz. Physis 20: 261-281.

40. Mahurin-Smith J (2016) Mothers' perspectives on effective assistance with breast-feeding problems. Clin Lact 7: 142-147.

41. Witt A, Smith S, Mason M, Flocke S (2012) Integrating routine lactation consultant support into a pediatric practice. Breastfeed Med 7: 38-42.

42. Bäckström CA, Wahn E, Ekström AC (2010) Two sides of breastfeeding support: experiences of women and midwives. Int Breastfeed J 5: 20.

43. Turnbull-Plaza B, Escalante-Izeta E, Klunder-Klunder M (2006) The role of social networks in exclusive breastfeeding. Rev Med Inst Mex Seguro Soc 44: 97-104.

44. Prendergast E, James J (2016) Engaging mothers: breastfeeding experiences recounted (EMBER). A pilot study. Breastfeed Rev 24: 11-19.

45. Debevec T, Evanson T (2016) Improving breastfeeding support by understanding women's perspectives and emotional experiences of breastfeeding. Nurs Womens Health 20: 464-474.