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Challenges to the Breastfeeding Process in a Developing Community: The Case of Yaoundé in Cameroon

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Abstract

The world is fast developing, increasing the rate of cultural exchange including borrowed or adopted behaviours. A number of natural well-established practices such as breastfeeding tend to be replaced with novel adaptations such as formula milk and other substitutes, to the satisfaction of modernisation and globalisation. This gradual shift towards the artificial may sometimes be imposed by environmental and human exigences of our time. We conducted an observational study with mixed cross-sectional and longitudinal designs over a period of 6 months, to assess challenges to breastfeeding practices among a group of Cameroonian women in Yaoundé. We noticed that the level of maternal education, infection with HIV, preterm, low birthweight, neonatal infection, caesarean delivery and psycho-sociocultural influences through regional origin were considerable hindrances to the process in a developing community as ours. However, we suggest the reinforcement of community information, education, and communication, together with the improvement of perinatal care, as being necessary to facilitate the breastfeeding process, thereby favoring adequate child growth, assuring maternal and infant wellbeing.

Introduction

Exclusive breastfeeding is essential for the mother's wellbeing. It is as well fundamental for the newborn's development and indispensable for the reinforcement of bonding [1-8]. According to the World Health Organization (WHO), breastfeeding after childbirth should be initiated within the first 30 minutes to an hour following delivery. In effect, the rate of early initiation of breastfeeding determines the willingness, the readiness and the facility for mothers to observe the process. It is as well an indicator of feasibility, effectivity and continuity [9-15]. However, though breastfeeding contributes to the reduction of neonatal morbidity and mortality, it is oftentimes not respected or inadequately practiced. Contextual and geographical variability are thought to contribute significantly to such malpractices, especially in a developing context facing technological and societal progresses with challenges [9-15]. The main objective of this survey was to determine the factors associated with breastfeeding initiation, representing challenges to the overall process in our milieu. More specifically, we had to determine the rate of early (normal) initiation of breastfeeding among newly delivered women, to describe the pattern, identify hindrances and investigate consequences in mothers and their infants.

Methodology

We conducted an observational study type, based on a mixed cross-sectional and longitudinal design, with neonates being reassessed at 1 week after birth. The study was conducted in Yaoundé, the cosmopolite and rapidly developing capital of Cameroon. Our study site was the Yaoundé Gynaeco-Obstetric and Pediatric Hospital, a referral and university teaching hospital. The study period spanned from December 1st 2018 to May 31st 2019. We included newly delivered women with livebirth infants weighing > 2000g and without breastfeeding contraindications during the first hour of immediate postpartum. Women not consenting to take part in the study were excluded. Ethical principles were respected with ethical clearance and institutional authorizations obtained before the start of the study. The recruits' consents were obtained before their enrolment and they could freely withdraw from the study without consequences. Innocuity in assessments and clinical procedures was guaranteed. The information obtained was confidential and used for the purpose of this study only.

Results

We enrolled 250 mothers, originating mostly from the Centre region (110; 44%), with a secondary school education level in 107 (42.8%). The vaginal route was the main mode of childbirth in 172 (68.8%) women. The newborns had a mean gestational age of 38.4±1.6 weeks, the average birth weight was 3168,6 ± 508,7g. There was male predominance of sex ratio (1.29). Delivery was eutocic in 230 women (92%) and 199 (79.6%) had the intension to exclusively breastfeed their babies. The state of the

neonates was satisfactory in 204 (96%) deliveries. The average time of breastfeeding initiation was 120 minutes and only 97 (38.8%) of mothers had put the baby on to the breast within the first hour after birth, while 153 (61.2%) faced challenges initiating the breastfeeding process. Breast pathologies occurred in 85 of such women (55.5%), among which 24 (28.2%) had secretion anomalies predominated by quantitative disorders. Painful inflammatory and/or infectious conditions occurred in 58 of these women (69.4%). All women with obvious or supposed breast disorders had inadequate breastfeeding practices. All neonates with delayed breastfeeding initiation had other characteristics of inadequate breastfeeding practices. Although 144/153 (94%) neonates from mothers with breastfeeding challenges were in good health immediately after birth, 38 (24.8%) were hospitalized within 7 days, of which 21 (55.2%) were related with sepsis and 6 (15.7%) due to metabolic disorders. These poorly breastfed neonates represented 83.3% infants with hypotrophy (15 out of 18). After bivariate analysis, effective challenges to the breastfeeding process were: primary education level of mothers, HIV infection, gestational age below 37 weeks of pregnancy (preterm), low birthweight, neonatal infection, the Centre region as origin, and caesarean delivery. After a multivariate analysis by logistic regression of these factors, the Centre region as geographical origin, and caesarean delivery persisted as independent predictors of delayed breastfeeding initiation.

Discussion

The rate of Early Initiation of Breastfeeding (EIBF) may be considered as the percentage of newly born infant who are breastfed within the first hour following delivery. This contrasting with delayed breastfeeding initiation which is an undesired event in the breastfeeding process [9-15]. The results from this survey showed a low level of EIBF in our context at 40%, which is quite lower than values obtained in the majority of developed countries such as Australia, where values as high as 98% have been reported [16]. This is also lower than incidences reported in countries such as Saudi Arabia (77.8%), Nepal (66.4%) and in some African developing countries such as Ethiopia (73.1%), though our sample size was relatively smaller [17-20]. With respect to these results, we observed that the rate of delayed breastfeeding was considerably high in our survey, suggesting obstacles to the process in our context.

One of the most significant challenges to breastfeeding initiation was the education level of mothers, qualified here as primary school level. As a matter of fact, we found that the low level of school education was contributively responsible for poor understanding of instructions, ignorance, and the reinforcement of socio-cultural believes which were incompatible with adequate breastfeeding. On the other hand, highly educated women as well might have job occupations reducing their availability for breastfeeding as described by Bimerew [17]. However, delayed breastfeeding, as found in our survey was more likely to occur in women with low level of school education.

Although the WHO recommends six months exclusive breastfeeding in HIV-exposed neonates under maternal antiretroviral therapy (ART), and infant prophylaxis to reduce transmission, we observed reluctances [21-25]. This could be due to psychological self-protective behavior, bound with fear of infecting one's own infant. In effect, a number of earlier studies had reported maternal infection, especially with HIV, a barrier to breastfeeding practice, as emphasized by Bosi et al [21-27]. However, this may be overcome by the reinforcement of antenatal counselling with an accent on the advantage of breastfeeding, in order to strengthen neonates' immunity, reduce morbidity, mortality and assure normal growth as per Arifeen et al and Coovadia findings [24, 25].

Even though there is evidence that breastmilk feeding reduces mortality and morbidity in high risk infants, including those with infection, prematurity, and low birthweight, its initiation was delayed in our series of ill neonates [28-42]. This was probably due to the fact that these newborns were delivered with immediate neonatal emergencies such as neurologic, infectious, thermal regulation, digestive and feeding disorders. In effect, in such cases milk feeding may be delayed in order to rapidly attend vital emergencies, thereby causing retardation [28-42]. Nevertheless, the earlier initiation of breastfeeding could have enhanced rapid neonatal recovery.

We also noted mothers with inadequate breastfeeding practices mostly originated from the Centre region, though with possible selection bias, as the region hosted the study. Nevertheless, various regions in Cameroon may have specific cultures, traditions and different levels of socioeconomic development. We found a considerable number of women and mostly the poor, with specific traditional and cultural believes comprising bad thoughts about colostrum which they described as "spoiled breastmilk". Such women were likely to delay breastfeeding initiation [11, 14]. This contrasted with the common belief that women with low socioeconomic level, are prone to breastfeeding, given its cost-free natural availability [11, 14]. Thus, the need for geographically-focused breastfeeding interventions, culturally competent education and interventions in indigenous communities evoked by Ateo et al, was as well justified in our context [43].

Besides socio-cultural challenges, delivery by caesarean section (CS) was also found to be a predictive factor of delayed breastfeeding, with a number of possible explanations. This could corroborate with known CS-bound hormonal variations including reduced prolactin, oxytocin and endorphin levels, otherwise necessary for breastmilk production, ejection and mother-infant attachment [15]. On the other hand, general anesthesia might cause maternal sedation and altered consciousness in immediate postpartum, being responsible for delayed initiation of Breastfeeding [44, 45]. Furthermore, neonates delivered through caesarean section may develop transient tachypnea with respiratory distress, an emergency preventing them from breastfeeding as stipulated by Barrousseau et al [40]. This suggests general anesthesia should be avoided as much as possible during CS to prevent maternal and neonatal sedation and hence favoring EIBF among other advantages.

Conclusion and Recommendation

Despite its countless benefits, the time to initiate breastfeeding after delivery as found in our survey was very long. Challenges to this practice in our context were characterized by maternal, neonatal, healthcare-interventional factors and psycho-sociocultural parameters. This may be overcome through the reinforcement of women information, population education, and communication. Moreover, the improvement of perinatal care, in order

to facilitate the breastfeeding process, is necessary to prevent related complications.

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