Original Article

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SKIN TO SKIN CONTACT AND THE EARLY INITIATION OF BREASTFEEDING: A CROSS-SECTIONAL STUDY

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ABSTRACT

Objective: to identify the prevalence and factors associated with the occurrence of skin-to-skin contact and the early initiation of breastfeeding in a Baby-friendly hospital in northeastern Brazil.
Method: cross-sectional study, composed of pregnant women, in which delivery occurred at the Baby-friendly Hospital. Data were collected between April 2017 and May 2019 through forms containing sociodemographic variables, obstetric history and data on the delivery and birth of the newborn. The possible associated factors were analyzed through the chi-square test, adopting the significance level of 0.05.
Result: among the 727 pregnant women, skin-to-skin contact occurred in 83.6% and breastfeeding in 58.3%. Full-term birth, birth weight ≥ 2500g, Apgar index >7 in the first minute, vaginal delivery, 6 or more prenatal consultations and years of study >9 were the factors associated with the practice of skin-to-skin contact. Regarding breastfeeding, in addition to the first five factors related to skin-to-skin contact, a statistical relationship with the beginning of prenatal care in the first trimester, skin-to-skin contact and multiparity was also evidenced.
Conclusions: this study found a prevalence rate of skin-to-skin contact appropriate to a Baby-friendly Hospital and a direct association of this practice with breastfeeding.

DESCRIPTORS: Breast feeding. Postpartum period. Maternal and child health. Newborn. Parturition.

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CONTATO PELE A PELE E AMAMENTAÇÃO NA PRIMEIRA HORA DE VIDA: UM ESTUDO TRANSVERSAL

RESUMO

Objetivo: identificar a prevalência e os fatores associados à ocorrência do contato pele a pele e da amamentação na primeira hora de vida em um hospital Amigo da Criança do nordeste brasileiro.
Método: estudo transversal, composto por gestantes, nas quais o parto ocorreu no Hospital Amigo da Criança. Os dados foram coletados entre abril de 2017 e maio de 2019 por meio de formulários contendo variáveis sociodemográficas, história obstétrica e dados sobre o parto e nascimento do recém-nascido. Os possíveis fatores associados foram analisados através do teste qui quadrado, adotando o nível de significância de 0,05.
Resultado: entre as 727 gestantes estudadas o contato pele a pele ocorreu em 83,6% e a amamentação em 58,3%. O nascimento a termo, peso ao nascer ≥ 2500g, índice de Apgar >7 no primeiro minuto, parto vaginal, realização de 6 ou mais consultas de pré-natal e anos de estudo >9 foram os fatores associados a prática do contato pele a pele. Quanto ao aleitamento, além dos cinco primeiros fatores relacionados ao contato pele a pele também foi evidenciada relação estatística com início do pré-natal no primeiro trimestre, contato pele a pele e multiparidade.
Conclusões: verificou-se nesse estudo taxa de prevalência de contato pele a pele adequada a um Hospital Amigo da Criança e associação direta dessa prática com a amamentação.

DESCRITORES: Aleitamento materno. Período pós-parto. Saúde materno-infantil. Recém-nascido. Parto.

CONTACTO PIEL CON PIEL Y LACTANCIA MATERNA EN LA PRIMERA HORA DE VIDA: UN ESTUDIO TRANSVERSAL

RESUMEN

Objetivo: identificar la prevalencia y factores asociados a la ocurrencia de contacto piel con piel y lactancia materna en la primera hora de vida en un hospital Amigo del Niño en el noreste de Brasil.
Método: estudio transversal, compuesto por mujeres embarazadas, en el que el parto tuvo lugar en el Hospital Amigo del Niño. Los datos fueron recolectados entre abril y maio de 2019 a través de formularios que contienen variables sociodemográficas, antecedentes obstétricos y datos sobre el parto y nacimiento del recién nacido. Los posibles factores asociados se analizaron mediante la prueba de chi-cuadrado, adoptando un nivel de significancia de 0,05.
Resultado: entre las 727 mujeres embarazadas estudiadas, el contacto piel con piel ocurrió en el 83,6% y la lactancia materna en el 58,3%. El parto a término, el peso al nacer ≥ 2500g, la puntuación de Apgar> 7 en el primer minuto, el parto vaginal, 6 o más consultas prenatales y los años de estudio> 9 fueron factores asociados a la práctica del contacto piel con piel. En cuanto a la lactancia materna, además de los primeros cinco factores relacionados con el contacto piel a piel, también existía una relación estadística con el inicio de la atención prenatal en el primer trimestre, el contacto piel con piel y la multiparidad.
Conclusiones: este estudio encontró una tasa de prevalencia de contacto piel con piel apropiada para un Hospital Amigo del Niño y una asociación directa entre esta práctica y la lactancia materna.

DESCRIPTORES: Lactancia materna. Periodo posparto. Salud materno-infantil. Recién nacido. Parto.

INTRODUCTION

The first 60 minutes of life represents a moment of critical changes in which the newborn (NB) will need to adapt quickly to the physiological changes of important systems such as cardiovascular, respiratory, immunological and metabolic[1–2]. This first hour, also called the golden hour, is important due to its relevance to the growth and development of the child providing immediate and long-term benefits in their health[2–3].

Skin-to-Skin Contact (SSC) and the early Initiation of Breastfeeding are simple practices that play an important role during this period of neonatal adaptation, strengthening the bond between mother and baby and avoiding early neonatal complications, such as neonatal hypothermia and hypoglycemia[1,4–6].

It is worth noting that the SSC consists of placing the naked baby on the mother´s chest immediately after birth without interruptions[3,4,7]. Unless the baby or mother is unstable, it is recommended that this moment is encouraged, protected and respected whenever possible[4,7–8]. During this period, neonatal evaluations such as the Apgar index and some non-urgent procedures, including the administration of vitamin K, for example, can be performed while the newborn is on the mother's abdomen, and others such as weighing and measurements can be postponed for at least 1 hour[4,7–8].

The literature reveals the negative repercussions that occur when this maternal contact is not performed in newborns. Among these, the increase in stress levels, evidenced by intense and prolonged crying, which may compromise pulmonary functioning, intracranial pressure and closure of the foramen ovale[3–4].

The child's birth conditions, as well as the type of delivery, are the main protective factors for performing SSC and early initiation of breastfeeding[9–11]. The practice of breastfeeding seems to have a "dose-dependent" relationship with skin-to-skin contact[11–15]. Since during SCC the baby is able to demonstrate its own intuitive behaviors by moving toward the mother's nipple and initiating suction[3].

Since 1981, with the creation of the National Breastfeeding Incentive Program (PNIAM), actions to encourage, protect and support breastfeeding have been a priority in Brazil. In 1992, the implementation of the Baby-Friendly Hospital Initiative (BFHI) began, as an action of PNIAM and the Child Health Defense Group[16].

The BFHI has "Ten Steps to Successful Breastfeeding", which must be implemented by the hospitals that will join. The fourth step is highlighted: "Helping mothers start breastfeeding within the first half hour after birth", interpreted as providing skin-to-skin contact between mothers and their babies immediately after delivery for at least one hour. And encourage them to recognize when their babies are ready to start breastfeeding, assisting them if necessary[16–17].

To meet the fourth step, two global criteria should be followed: at least 80% of mothers must confirm that they had and maintained skin-to-skin contact with their babies for at least one hour and 80% should confirm that they were encouraged to breastfeed during this time[17].

In several maternity hospitals, including those holding the title Baby-Friendly Hospital – BFH, women and their babies are not being offered the opportunity to experience the golden hour, so that routine procedures and hospital policies are fulfilled[1,17]. The study conducted in a public maternity hospital in Paraíba, holder of the title, observed that, although part of the puerperal women had the chance to hold their babies in their arms, only a minority (9.3%) was able to maintain continuous and uninterrupted contact for more than 30 minutes or until they performed the first feeding as recommended[18].

Even accredited, the hospital remains in the process of monitoring and reassessment, with the objective that its health professionals are supported and encouraged to maintain the "baby-friendly" practices; to verify if the mothers' experiences in the hospital have positively influenced breastfeeding, as well as to identify if there are deficiencies related to any of the ten steps[16].

In this sense, this study aimed to identify the prevalence and factors associated with the occurrence of skin-to-skin contact and breastfeeding in the first hour of life in a baby-friendly hospital in northeastern Brazil.

METHOD

This is a cross-sectional study with operational objectives through the section of the study "Nutrition and infection: the problem revisited due to the outbreak of microcephaly". A cohort study with data collection conducted between April/2017 and May/2019 by the Group of Integrated Studies on Nutrition and Health of the Institute of Integral Medicine Professor Fernando Figueira (IMIP), with support from the National Council for Scientific and Technological Development (CNPq) (process nº. 440815/2016-9).

The population of the current study was represented by the pregnant women of the original study. The women whose delivery occurred in the IMIP were excluded and the participants with outcome of abortion or fetal death and lack of information necessary for the study were excluded. The sample of the original study was of convenience and consecutive, represented by pregnant women attended at prenatal consultations at IMIP, with gestational age up to 30 weeks, who agreed to participate in the study.

In order to obtain participants, daily visits were made from Monday to Friday to the Women's Care Center (CAM) of IMIP, a national and regional reference center of the Unified Health System (SUS) in the Maternal and Child area. The pregnant women were approached as they attended follow-up care in the prenatal care program, and were invited to participate in the research by the team of interviewers. In case of agreement, the pregnant woman was taken to a reserved room, where the objectives and procedures of the research were detailed and clarification of additional doubts.

Previously trained undergraduate students participated in the collection of professional data from different higher education functions. Forms were applied with sociodemographic variables and obstetric medical history by means of semi-structured interviews, which lasted from 15 to 20 minutes. Subsequently, the participants were followed up by telephone contact and/or search in the medical records until the end of pregnancy to collect data on delivery and birth.

Among the 1,469 pregnant women in the database, 583 were excluded due to having the delivery in another service, 68 due to abortion or fetal death, and 91 due to lack of data needed for analysis, thus resulting in a final sample of 727 pregnant women.

Sociodemographic variables were studied: maternal age in years (<20, 20 to 35, 36 or older), residence (urban, rural), race (white, black or brown, indigenous, yellow), marital status (with partner, no partner), years of schooling (<9, 9 to 11, 12 or more), paid occupation (yes/no), per capita income in minimum wage (<0.5, 0.5 to 1, ≥1).

As well as obstetric variables: parity (nulliparous, primiparous, multiparous), beginning of prenatal care in the 1st trimester (yes/no), number of prenatal consultations (<6, 6 or more), type of delivery (vaginal, cesarean), delivery time between 0 and 5 in the morning (yes/no), sex of the newborn (female, male), birth weight (<2500g, 2500 to 3000g, >3000g), Apgar index in the first minute >7 (yes/no), skin-to-skin contact and early initiation of breastfeeding (yes/no) and justifications in case of non-occurrence.

Income data are presented in minimum wages according to the value in force in the country at the time the data were collected. When these data were collected in 2017 and 2018, an arithmetic mean of the two values were: R$ 937.00 (2017) and R$ 954.00 (2018), with an average = R$ 945.50.

An *ad hoc* bank was constructed with the variables of interest for the purpose of this study. The variables were recoded when necessary for statistical analysis, according to the proposed objectives.

The sociodemographic and obstetric variables were categorized and summarized through absolute and relative frequencies. For interval estimates, the 95% confidence level was adopted. Possible factors associated with skin-to-skin contact and breastfeeding in the first hour were evaluated by the chi square test, adopting a significance level of < 5%. Statistical analyses were performed using stata 12.1SE software. The study was approved by the IMIP research ethics committee.

RESULTS

The prevalence of skin-to-skin contact in the first hour of life was 83.6% (608/727) and breastfeeding in the first hour was 58.3% (424/727). The study reveals a population aged up to 35 years (83.5%), coming from the urban area (97.8%), who declare themselves black/brown (72.8%), have a partner (79.4%), have at least completed elementary school (68%) and have no paid occupation (53%). Regarding obstetric characteristics, the majority were nullipara (44.8%), started prenatal care in the first trimester (61.4%), had 6 or more prenatal consultations (90.2%) and the type of delivery was vaginal (52.4%).

Table 1 shows that most mothers (59.7% and 48.5%) claimed that neonatal complications and/or prematurity were responsible for the absence of skin-to-skin contact and breastfeeding in the first hour, respectively.

Table 1 – Reasons claimed by mothers for not occurring skin-to-skin contact and/or early initiation of breastfeeding. Recife, Pernambuco, Brazil, 2019.

Variable	No. (%)
Because there was no skin-to-skin contact (n=119)	
Neonatal complications and/or prematurity	71 (59.7)
Maternal complications and/or maternal procedure after childbirth	11 (9.2)
Don't know or didn't justify	37 (31.1)
Because the baby was not placed in the chest at the 1st hour (n=303)	
Neonatal complications and/or prematurity	147 (48.5)
Maternal complications and/or maternal procedure after childbirth	23 (7.6)
Awaiting serological test results	3 (1.0)
HIV-positive mother	8 (2.6)
Difficulty breastfeeding	9 (2.9)
Guidance and/or professional conduct	8 (2.6)
Don't know or didn't justify	105 (34.7)

*Sample varied due to lack of information

Table 2 shows the results of the chi square test for possible factors associated with skin-to-skin contact in the first hour of life. Schooling was statistically significant >9 years of study, term birth, vaginal delivery, birth weight ≥ 2,500g, Apgar index >7 and 6 or more prenatal consultations.

Table 2 – Factors associated with skin-to-skin contact in the first hour of life in a baby-friendly hospital. Recife, Pernambuco, Brazil, 2019.

Variable (n*)	Skin-to-skin contact in the 1st hour		P†
	Yes (%)	No (%)	
Maternal age (n=727)			0.905
< 20 years old	54 (81.8)	12 (18.2)	
20 to 35 years	454 (83.9)	87 (16.1)	
36 years or older	100 (83.3)	20 (16.7)	
Residence (n=727)			0.672
Urban	594 (83.5)	117 (16.5)	
Rural	14 (87.5)	2 (12.5)	
Race (n=724)			0.055
White	105 (76.1)	33 (23.9)	
Black/Brown	449 (85.2)	78 (14.8)	
Indian	9 (90.0)	1 (10.0)	
Yellow	43 (87.8)	6 (12.2)	
Marital status (No. 727)			0.271
No partner	121 (80.7)	29 (19.3)	
Partner	487 (84.4)	90 (15.6)	
Years of study (n=727)			0.043
< 9 years old	84 (75.7)	27 (24.3)	
9 to 11 years	422 (85.4)	72 (14.6)	
12 years or older	102 (83.6)	20 (16.4)	
Paid occupation (n=726)			0.857
Yes	286 (83.9)	55 (16.1)	
No	321 (83.4)	64 (16.6)	
Per capita income (n=651)			0.422
<0.5 MS‡	239 (83.0)	49 (17.0)	
0.5 a 1.0 MS‡	199 (86.5)	31 (13.5)	
>= 1.0 MS‡	109 (82.0)	24 (18.0)	
Parity (n=727)			0.234
Nulliparous	266 (81.6)	60 (18.4)	
Primiparous	206 (83.7)	40 (16.3)	
Multiparous	136 (87.7)	19 (12.3)	
Started prenatal 1st trimester (n=725)			0.076
Yes	364 (81.8)	81 (18.2)	
No	243 (86.8)	37 (13.2)	
Delivery between 0 and 5 o'clock in the morning (n=715)			0.162
Yes	119 (87.5)	17 (12.5)	
No	478 (82.6)	101 (17.4)	
Newborn Sex (n=727)			0.231
Male	297 (85.3)	51 (14.7)	
Female	311 (82.1)	68 (17.9)	
Prematurity (n=726)			< 0.001
Yes	59 (58.4)	42 (41.6)	
No	548 (87.7)	77 (12.3)	

Table 2 – Cont.

Variable (n*)	Skin-to-skin contact in the 1st hour		P†
	Yes (%)	No (%)	
Type of delivery (n-727)			< 0.001
Vaginal	351 (92.1)	30 (7.9)	
Caesarean section	257 (74.3)	89 (25.7)	
Birth weight (n=724)			< 0.001
<2500g	59 (61.5)	37 (38.5)	
2500 a 3000g	140 (84.8)	25 (15.2)	
>3000g	407 (87.9)	56 (12.1)	
Apgar Index 1°min >7 (n=690)			< 0.001
Yes	536 (87.2)	79 (12.8)	
No	39 (52.0)	36 (48.0)	
Number of prenatal consultations (n=711)			< 0.001
<6 consultations	46 (65.7)	24 (34.3)	
6 or more consultations	550 (85.8)	91 (14.2)	

*Sample varied due to lack of information; †Chi Square Test; ‡Average minimum wage in force= 945.50, Brazil, 2017 and 2018.

Regarding the occurrence of early initiation of breastfeeding, there was an association with multiparity, beginning of prenatal care after the 1st trimester, full-term birth, vaginal delivery, birth weight ≥ 2,500g, Apgar index >7, 6 or more prenatal consultations and skin-to-skin contact (Table 3).

Table 3 – Factors associated with early initiation of breastfeeding in a baby-friendly hospital. Recife, Pernambuco, Brazil, 2019.

Variable (n*)	Early Initiation of Breastfeeding		P†
	Yes (%)	No (%)	
Maternal age (n=727)			0.620
< 20 years old	36 (54.5)	30 (45.5)	
20 to 35 years	314 (58.0)	227 (42.0)	
36 years or older	74 (61.7)	46 (38.3)	
Residence(n=727)			0.171
Urban	412 (57.9)	299 (42.1)	
Rural	12 (75.0)	4 (25.0)	
Race (n=724)			0.098
White	68 (49.3)	70 (50.7)	
Black/Brown	319 (60.5)	208 (39.5)	
Indian	7 (70.0)	3 (30.0)	
Yellow	28 (57.1)	21 (42.9)	
Marital status (No. 727)			0.928
No partner	87 (58.0)	63 (42.0)	
Partner	337 (58.4)	240 (41.6)	
Years of study (n=727)			0.123
< 9 years old	55 (49.5)	56 (50.5)	
9 to 11 years	297 (60.1)	197 (39.9)	
12 years or older	72 (59.0)	50 (41.0)	

Table 3 – Cont.

Variable (n*)	Early Initiation of Breastfeeding		P†
	Yes (%)	No (%)	
Paid work (n=726)			0.898
Yes	200 (58.7)	141 (41.3)	
No	224 (58.2)	161 (41.8)	
Renda per capita (n=651)			0.149
<0,5 SM‡	173 (60.1)	115 (39.9)	
0.5 a 1.0 SM‡	140 (60.9)	90 (39.1)	
>= 1.0 SM‡	68 (51.1)	65 (48.9)	
Parity (n=727)			0.034
Nulliparous	176 (54.0)	150 (46.0)	
Primiparous	145 (58.9)	101 (41.1)	
Multiparous	103 (66.5)	52 (33.5)	
Prenatal start in the 1st trimester (n=725)			0.012
Yes	244 (54.8)	201 (45.2)	
No	180 (64.3)	100 (35.7)	
Delivery between 0 and 5 o'clock in the morning (n=715)			0.173
Yes	86 (63.2)	50 (36.8)	
No	329 (56.8)	250 (43.2)	
Newborn Sex (n=727)			0.543
Male	207 (59.5)	141 (40.5)	
Female	217 (57.3)	162 (42.7)	
Prematurity (n=726)			< 0.001
Yes	29 (28.7)	72 (71.3)	
No	395 (63.2)	230 (36.8)	
Type of delivery (n-727)			< 0.001
Vaginal	253 (66.4)	128 (33.6)	
Caesarean section	171 (49.4)	175 (50.6)	
Birth weight (n=724)			< 0.001
<2500g	26 (27.1)	70 (72.9)	
2500 a 3000g	97 (58.8)	68 (41.2)	
>3000g	299 (64.6)	164 (35.4)	
Apgar Index 1°min >7 (n=690)			< 0.001
Yes	378 (61.5)	237 (38.5)	
No	24 (32.0)	51 (68.0)	
Number of prenatal consultations (n=711)			< 0.001
<6 consultations	27 (38.6)	43 (61.4)	
6 or more	388 (60.5)	253 (39.5)	
Skin-to-skin contact in the 1st hour (n=727)			< 0.001
Yes	423 (69.6)	185 (30.4)	
No	1 (0.8)	118 (99.2)	

*Sample varied due to lack of information; †Chi-Square Test; ‡Average minimum wage in force=945.50, Brazil, 2017 and 2018.

DISCUSSION

The prevalence of skin-to-skin contact in the first hour of life was 83.6% and the early initiation of breastfeeding occurred in 58.3% of cases. It was also evidenced that the most highlighted cause of the absence of skin-to-skin contact and early initiation of breastfeeding was due to neonatal complications and/or prematurity, while schooling greater than 9 years of schooling, full birth, birth weight ≥ 2500g, Apgar index >7, vaginal delivery and the performance of six or more prenatal consultations were the main protective factors.

Skin-to-skin contact is a strategy that impacts the success of breastfeeding, bringing benefits that have repercussions throughout the child's life cycle[3,13–15]. From this perspective, the result found is in agreement with the first overall criterion of the fourth step for the success of breastfeeding recommended by the BFHI, which recommends the SCC in at least 80% of the puerperal women[17].

In relation to early initiation of breastfeeding, a lower prevalence (58.3%) was found when compared to SCC. Compared to another study conducted at the same institution in 2014, in which among the 562 newborns (NBs) only 31% breastfeed in the first hour of life[9], an increase in this practice was observed . It is important to take into account that this data may indicate that, although the SCC is proportionate, it may not be carried out in a manner recommended by the Ministry of Health, in which there should be no interruption of the SCC for one hour[7].

A cross-sectional study conducted in a BFH in the state of Paraíba was highlighted, in which it was evidenced that only the minority of puerperal women who had the chance to hold their baby at birth maintained continuous contact[18]. This interrupted contact prevents the baby from going through the nine instinctive stages (crying, relaxation, awakening, activity, rest, screening, familiarization, sucking and sleep), which takes about an hour from the crossing of the first stages to suction[4]. This period is important for breastfeeding, as most babies may respond to olfactory receptors, which lead to the mother's nipple[3].

In addition, in relation to SCC and early initiation of breastfeeding, a study conducted in a public hospital located in southern Brazil, which also holds the baby-friendly hospital title, obtained 81% for SCC and 52% for early initiation of breastfeeding[19]. Another study that analyzed the early initiation of breastfeeding rate in 57 countries showed that the prevalence varied between 31 and 60% in the years 2000 to 2013[20]. In view of this scenario, it is observed that the results found in the current study are compatible or even better when compared to those found in the literature in other institutions at national and international level.

Regarding the causes for the non-occurrence of SSC and early initiation of breastfeeding, the main one was "neonatal complications and/or prematurity". Secondly, "not knowing or not having justification" for the lack of the SCC. This cause was also pointed out for the non-occurrence of early initiation of breastfeeding. This is a relevant data that may be related to a possible communication failure between the health team and the patient, who must be continuously informed about her health and that of her baby[21]. Regarding neonatal complications, a cross-sectional study conducted in California also points to neonatal complications, as well as obstetric complications, as the main causes for non-occurrence of early initiation of breastfeeding[22].

Also regarding the absence of the early initiation of breastfeeding, the following justifications were also pointed out: "difficulty in breastfeeding", followed by "guidance and/or professional conduct" and "mother with HIV-positive serology". The latter is a permanent contraindication for breastfeeding, in these cases the BFH must have strategies for HIV-positive mothers to receive counseling and guidance regarding the feeding of their child. Among the strategies, the free distribution or reduced prices of milk formula by the SUS is highlighted, as well as guidance on the ideal conditions of preparation, sufficient quantity and frequency for the adequate growth and development of the child[16–17].

Regarding the difficulty in breastfeeding, inverted nipple or history of mastoplasty was a hindrance to the early initiation of breastfeeding. Although both conditions may hinder breastfeeding, a study conducted in the state of Espírito Santo portrays the experience of breastfeeding women after breast surgery, presented in the results, that although exclusive breastfeeding did not continue, 84.6% of the interviewees breastfed their babies in the first hour[23]. For the second condition, inverted nipple, the use different strategies are necessary, which should be oriented in prenatal care, through educational health actions[24].

Regarding the factors associated with the occurrence of SCC and the early initiation of breastfeeding, both shared: full-term birth, birth weight ≥ 2500g, Apgar index >7, vaginal delivery and the performance of 6 or more prenatal consultations. The first three factors demonstrate the strong influence that the baby's birth conditions have on the protection of these two benefits.

It is known that prematurity can reduce the skills necessary for the child to adapt to extrauterine life, increasing the chances of interventions to ensure its stability, and as a consequence, decrease the chances of skin-to-skin contact and the early initiation of breastfeeding[10–25].

The Brazilian Society of Pediatrics states that, in Brazil, prematurity and its complications, as well as newborns with very low birth weight, represent a small portion of live births, however, contribute to more than 50% of neonatal deaths[8]. Regarding the Apgar index in the 1st minute, a study shows that, NBs that obtained <7, had a longer time interval to start the first feeding[10].

Regarding childbirth, the national survey *Nascer Brasil* (2014) showed high numbers of early separation between the mother-baby binomial when the type of delivery was cesarean section[26]. A fact also observed by other studies, which revealed that women undergoing cesarean section, have almost three times the risk of not performing SCC with early initiation of breastfeeding. Newborns born by vaginal delivery were more prepared to start breastfeeding compared to those born by cesarean section, since they spent more time in early contact with the mother[10–11,19,27]. These data corroborate the findings of this research.

The current study indicated a relatively high number of cesarean surgeries, which may be due to the profile of the maternity studied, which is a reference in medium and high complexity. The World Health Organization (WHO) stresses that cesarean section can result in significant complications and even death, so efforts should focus on ensuring that only cases with medical indication are performed[28]. High-risk pregnancy is not a defining condition for surgical delivery, because with constant vigilance, changes can be identified and treated quickly and early, allowing a safe evolution to normal delivery[29].

Even with statistics of the high rate of surgical births, one should question the lack of protocols that support the SCC in these cases. Any unstable child should be immediately evaluated and stabilized, however, stable mothers and babies deserve to experience the same humanizing practices as those who undergo normal delivery[4]. With adequate monitoring of the child and mother SCC can remain uninterrupted.

Prenatal care is also a protective factor for the humanizing practices discussed here. In this study, most mothers who had 6 or more consultations initiated early breastfeeding, although those who breastfed early started prenatal care only after the first trimester.

Although they have not been questioned about the existence of guidelines on SCC and early initiation of breastfeeding during consultations, it is understood that a larger number of consultations may indicate more opportunities for the subject to be addressed. It is important to show that health education can be fundamental to provide a greater role of women in their pregnancy-puerperal cycle[21].

Regarding parity, multiparous women were in greater numbers in those who performed early initiation of breastfeeding, which suggests that those who had a probable previous experience with breastfeeding had more success in putting early initiation of breastfeeding into practice[10].

It was also observed that the SCC was an important factor of protection of early initiation of breastfeeding in this study, which evidences how the protection of this practice is relevant in the achievement and success of breastfeeding[12–15,30].

Finally, it is worth noting that the present study did not evaluate the duration of the skin-to-skin contact and whether it occurred before or after the immediate care of the newborn, even if it was within the first hour, which may be considered a limitation. Therefore, it is suggested that new studies should cover these issues, as well as whether the non-occurrence of breastfeeding has been due to the lack of stimulation and support of the professionals in the delivery room.

CONCLUSION

In this study, a prevalence rate of skin-to-skin contact considered appropriate for a BFH was verified. The occurrence of SCC and the early initiation of breastfeeding was associated with full-term birth, birth weight ≥ 2500g, Apgar index >7, vaginal delivery and 6 or more prenatal consultations. Moreover, SCC was directly related to the early initiation of breastfeeding, emphasizing the relevance of this practice.

The protection, promotion and support to breastfeeding is highlighted as a contribution to nursing and health, encouraging skin-to-skin contact and breastfeeding in the first hour of life, respecting the biological and social conditions of women.

REFERENCES

1. Neczypor JL, Holley SL. Providing evidence-Based care during the Golden hour. Nurs Womens Health [Internet]. 2017 [cited 2019 Nov 14];21(6):462-72. Available from: https://doi.org/10.1016/j.nwh.2017.10.011
2. Sharma D, Sharma P, Shastri S. Golden 60 minutes of newborn's life: Part 2: Term neonate. J Matern Fetal Neonatal Med [Internet]. 2017 [cited 2019 Nov 14];30(22):2728-33. Available from: https://doi.org/10.1080/14767058.2016.1261399
3. Karimi FZ, Sadeghi R, Maleki-Saghooni N, Khadivzadeh T. The effect of mother-infant skin to skin contact on success and duration of first breastfeeding: A systematic review and meta-analysis. Taiwan J Obstet Gynecol [Internet]. 2019 [cited 2020 Jan 14];58:1-9. Available from: https://doi.org/10.1016/j.tjog.2018.11.002
4. Phillips R. The sacred hour: Uninterrupted Skin-to-Skin Contact Immediately After Birth. Newborn Infant Nurs Rev [Internet]. 2013 [cited 2019 Nov 17];13:67-72. Available from: https://doi.org/10.1053/j.nainr.2013.04.001
5. Safari K, Saeed AA, Hasan SS, Moghaddam-Banaem L. The effect of mother and newborn early skin-to-skin contact on initiation of breastfeeding, newborn temperature and duration of third stage of labor. Int Breastfeed J [Internet]. 2018 [cited 2021 May 01];13:32. Available from: https://doi.org/10.1186/s13006-018-0174-9
6. Ministério da Saúde (BR). Além da sobrevivência: Práticas integradas de atenção ao parto, benéficas para a nutrição e a saúde de mães e crianças. [Internet] Brasília, DF(BR); 2013 [cited 2019 Nov 17]. Available from: https://portaldeboaspraticas.iff.fiocruz.br/wp-content/uploads/2019/06/alem_sobrevivencia_praticas_integradas_atencao.pdf
7. Albuquerque RS, Neto CM, Bersusa AAS, Dias VM, Silva MIM. Newborns' temperature submitted to radiant heat and to the Top Maternal device at birth. Rev Latino-Am Enfermagem [Internet]. 2016 [cited 2020 May 03];24:e2741. Available from: https://doi.org/10.1590/1518-8345.0305.2741

8. Sociedade Brasileira de Pediatria. Nascimento seguro. Documento científico n.3, April 2018. [Internet] 2018 [cited 2020 Mar 15]. Available from: https://www.sbp.com.br/fileadmin/user_upload/Neonatologia_-_20880b-DC_-_Nascimento_seguro__003_.pdf

9. Belo MNM, Azevedo PTACC, Belo MPM, Serva VMSBD, Batista Filho M, Figueiroa JM, et al. Breastfeeding in the first hour of life in a Child-Friendly Hospital: prevalence, associated factors and reasons for its non-occurrence. Rev Bras Saude Mater Infant [Internet]. 2014 [cited 2020 Jan 14];14(1):65-72. Available from: https://doi.org/10.1590/S1519-38292014000100006

10. Saco MC, Coca KP, Abrão ACFV, Marcacine KO, Abuchaim ESV. Skin-to-skin contact followed by breastfeeding in the first hour of life: associated factors and influences on exclusive breastfeeding. Texto Contexto Enferm [Internet]. 2019 [cited 2020 May 03];28:e20180260. Available from: https://doi.org/10.1590/1980-265x-tce-2018-0260

11. Cinquetti M, Colombari AM, Battisti E, Marchetti P, Piacentini G. The influence of type of delivery, skin-to-skin contact and maternal nationality on breastfeeding rates at hospital discharge in a baby-friendly hospital in Italy. Pediatr Med Chir [Internet]. 2019 [cited 2021 May 07];41:207. Available from: https://doi.org/10.4081/pmc.2019.207

12. Moore ER, Bergman N, Anderson GC, Medley N. Early skin-to-skin contact for mothers and their healthy newborn infants. Cochrane Database Syst Rev [Internet]. 2016 [cited 2021 May 07];11(11):CD003519. Available from: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003519.pub4/full?highlightAbstract=cd003519

13. Guala A, Boscardini L, Visentin R, Angellotti P, Grugni L, Barbaglia M, et al. Skin-to-skin contact in cesarean birth and duration of breastfeeding: a cohort study. Sci World J [Internet]. 2017 [cited 2021 May 07];2017:1940756. Available from: https://doi.org/10.1155/2017/1940756

14. Vila-Candel R, Duke K, Soriano-Vidal FJ, Castro-Sánchez E. Affect of early skin-to-skin mother-infant contact in the maintenance of exclusive breastfeeding: experience in a Health Department in Spain. J Hum Lact [Internet]. 2018 [cited 2021 May 07];34(2):304-12. Available from: https://doi.org/10.1177/0890334416676469

15. Singh K, Khan SM, Carvajal-Aguirre L, Brodish P, Amouzou A, Moran A. The importance of skin-to-skin contact for early initiation of breastfeeding in Nigeria and Bangladesh. J Glob Health [Internet]. 2017 [cited 2021 May 07];7(2):020505. Available from: https://doi.org/10.7189/jogh.07.020505

16. United Nations Children's Fund, World Health Organization. Child-Friendly Hospital Initiative: revised, updated and expanded for integrated care: module 4: self-assessment and monitoring of the hospital [Internet]. Brasília, DF(BR): WHO; 2010 [cited 2019 Dec 10]. Available from: https://portaldeboaspraticas.iff.fiocruz.br/wp-content/uploads/2017/12/10.-FUNDO-DAS-NA%C3%87%C3%95ES-UNIDAS-PARA-A-INF%C3%82NCIA.-m%C3%B3dulo-4.pdf

17. World Health Organization, United Nations Children's Fund. Hospital Amigo da Criança Initiative: revised, updated and expanded for integrated care: module 1: history and implementation [Internet]. Brasília (DF): WHO; 2008 [cited 2019 Dec 10]. Available from: http://www.redeblh.fiocruz.br/media/modulo1_ihac_alta.pdf

18. Sampaio ARR, Bousquat A, Barros C. Skin-to-skin contact at birth: a challenge for promoting breastfeeding in a "Baby Friendly" public maternity hospital in Northeast Brazil. Rev Epidemiol Serv Saude [Internet]. 2016 [cited 2020 May 18];25(2):281-90. Available from: https://doi.org/10.5123/s1679-49742016000200007

19. Abdala LG, Wedge MLC. Skin-to-skin contact between mother and newborn and breastfeeding in the first hour of life. Clin Biomed Res [Internet]. 2018 [cited 2020 Mar 15];38(4):356-60. Available from: https://doi.org/10.4322/2357-9730.82178

20. Oakley L, Benova L, Macleod D, Lynch CA, Campbell OMR. Early breastfeeding practices: Descriptive analysis of recent Demographic and Health Surveys. Matern Child Nutr [Internet]. 2018 [cited 2020 Aug 26]; 14:e12535. Available from: https://doi.org/10.1111/mcn.12535

21. Campos PM, Gouveia HG, Strada JKR, Moraes BA. Skin-to-skin contact and breastfeeding of newborns in a university hospital. Rev Gaúcha Enferm [Internet]. 2020 [cited 2020 Jul 20];41(Spe):e20190154. Available from: https://doi.org/10.1590/1983-1447.2020.20190154

22. Cadwell K, Brimdyr K, Phillips R. Mapping, measuring, and analyzing the process of skin-to-skin contact and early breastfeeding in the first hour after birth. Breastfeed Med [Internet]. 2018 [cited 2021 May 07];13(7):485-92. Available from: https://doi.org/10.1089/bfm.2018.0048

23. Camargo JF, Modenesi TSS, Brandão MAG, Cabral IE, Pontes MB, Primo CC. Breastfeeding experience of women after mammoplasty. Rev Esc Enferm USP [Internet]. 2018 [cited 2020 Aug 23];52:e03350. Available from: https://doi.org/10.1590/s1980-220x2017020003350

24. Pitilin EB, Polleto M, Gasparin VA, Oliveira PP, Sbardelotto T, Schirmer J. Factors associated with breastfeeding self-efficacy according to nipple types. Rev Rene [Internet]. 2019 [cited 2020 Jul 02];20:e41351. Available from: https://doi.org/10.15253/2175-6783.20192041351

25. Lau Y, Tha PH, Ho-Lim SST, Wong LY, Lim PI, Citra Nurfarah BZM, et al. An analysis of the effects of intrapartum factors, neonatal characteristics, and skin-to-skin contact on early breastfeeding initiation. Matern Child Nutr [Internet]. 2018 [cited 2021 May 07];14(1):e12492. Available from: https://doi.org/10.1111/mcn.12492

26. Leal MC, Range SGN. Born in Brazil. Thematic executive research summary. National Survey on Childbirth and Birth. [Internet] Rio de Janeiro, RJ(BR): Fundação Oswaldo Cruz; 2014 [cited 2020 Apr 18]. Available from: http://www.ensp.fiocruz.br/portal-ensp/informe/site/arquivos/anexos/nascerweb.pdf

27. Allen J, Parratt JA, Rolfe MI, Hastie CR, Saxton A, Fahy KM. Immediate, uninterrupted skin-to-skin contact and breastfeeding after birth: a cross-sectional electronic survey. Midwifery [Internet]. 2019 [cited 2021 May 07];79:102535. Available from: https://doi.org/10.1016/j.midw.2019.102535

28. World Health Organization. WHO statement on caesarean section rates [Internet]. Geneva(CH): WHO; 2015 [cited 2020 Apr 18]. Available from: https://www.who.int/reproductivehealth/publications/maternal_perinatal_health/cs-statement/en/

29. Saraiva JM, Gouveia HG, Gonçalves AC. Factors associated with cesarean sections in a high complexity university hospital in southern Brazil. Rev Gaúcha Enferm [Internet]. 2017 [cited 2020 Aug 23];38(3):e69141. Available from: https://doi.org/10.1590/1983-1447.2017.03.69141

30. World Health Organization. Guideline: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services. Geneva (CH): World Health Organization; 2017 [cited 2019 Dec 10]. Available from: https://www.who.int/nutrition/publications/guidelines/breastfeeding-facilities-maternity-newborn/en/

NOTES

ORIGIN OF THE ARTICLE

Article extracted from the Residency Completion Work – Prevalence and factors associated with skin-to-skin contact and breastfeeding in the first hour of life in a Child-Friendly Hospital, presented to the Uniprofessional Nursing Residency Program in Obstetrics, of the *Instituto de Medicina Integral Professor Fernando Figueira*, in 2020.

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APPROVAL OF ETHICS COMMITTEE RESEARCH

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CONFLICT OF INTEREST

There is no conflict of interest.

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