Breastfeeding support rooms, benefits and challenges for implantation: cross-

sectional study

Salas de apoio à amamentação, benefícios e desafios para implantação: estudo transversal

Salas de apoyo a la lactancia, beneficios y desafíos para la implantación: estudio transversal

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Abstract

This study has the objective to analyze the profile of Breastfeeding Support Rooms in the southern states of Brazil to identify data on their use and monitoring, as well as challenges and benefits to their implementation. Descriptive cross-sectional study was carried out, and an online questionnaire was applied to supervisors from certified companies. All analyses were performed with the Statistic v.10.0 (Statsoft R) software. Sixteen certified Breastfeeding Support Rooms from 12 companies participated in the study. The median of women who used Breastfeeding Support Rooms 3 (1-28) was about five times lower than the median of employees on maternity leave 17 (1-184). The main challenges Breastfeeding Support Rooms face relate to the standardization of internal processes and their infrequent use, while their benefits include the encouragement of breastfeeding Support Rooms in Brazil. More benefits than challenges were found in companies that implemented Breastfeeding Support Rooms, our results identified important challenges for broadening the program.

Keywords: Breast feeding; Women, working; Program evaluation; Health promotion.

Resumo

Este estudo tem o objetivo de analisar o perfil das Salas de Apoio ao Aleitamento Materno nos estados do Sul do Brasil para identificar dados sobre sua utilização e monitoramento, bem como desafios e benefícios para sua implantação. Realizou-se um estudo descritivo transversal e aplicou-se um questionário online a supervisores de empresas certificadas. Todas as análises foram realizadas com o software Statistic v.10.0 (Statsoft R). Participaram do estudo 16 Salas de Apoio ao Aleitamento Materno certificadas de 12 empresas. A mediana das mulheres que utilizaram as Salas de Apoio ao Aleitamento Materno 3 (1-28) foi cerca de cinco vezes menor do que a mediana das funcionárias em licença maternidade 17 (1-184). Os principais desafios das Salas de Apoio ao Aleitamento Materno dizem respeito à padronização dos processos internos e sua utilização pouco frequente, enquanto seus benefícios incluem o incentivo ao aleitamento materno e a valorização das mães trabalhadoras. Este é o primeiro estudo que analisa o perfil das Salas de Apoio ao Aleitamento Materno no Brasil. Mais benefícios do que desafios foram encontrados nas empresas que implantaram Salas de Apoio ao Aleitamento Materno, nossos resultados identificaram desafios importantes para a ampliação do programa.

Palavras-chave: Aleitamento materno; Mulheres, trabalhando; Avaliação do programa; Promoção de saúde.

Resumen

Este estudio tiene como objetivo analizar el perfil de las Salas de Apoyo a la Lactancia Materna en los estados del sur de Brasil para identificar datos sobre su uso y monitoreo, así como desafíos y beneficios para su implementación. Se realizó un estudio transversal descriptivo y se aplicó un cuestionario en línea a los supervisores de las empresas certificadas. Todos los análisis se realizaron con el software Statistic v.10.0 (Statsoft R). Dieciséis Salas de Apoyo a la Lactancia Materna certificadas de 12 empresas participaron del estudio. La mediana de las mujeres que utilizaron las Salas de Apoyo a la Lactancia 3 (1-28) fue unas cinco veces menor que la mediana de las empleadas con licencia por

maternidad 17 (1-184). Los principales desafíos que enfrentan las Salas de Apoyo a la Lactancia Materna se relacionan con la estandarización de los procesos internos y su uso poco frecuente, mientras que sus beneficios incluyen el fomento de la lactancia materna y el reconocimiento de las madres trabajadoras. Este es el primer estudio que analiza los perfiles de las Salas de Apoyo a la Lactancia Materna en Brasil. Se encontraron más beneficios que desafíos en las empresas que implementaron Salas de Apoyo a la Lactancia Materna, nuestros resultados identificaron desafíos importantes para la ampliación del programa.

Palabras clave: Lactancia materna; Mujeres trabajando; Programa de evaluación; Promoción de la salud.

1. Introduction

Breastfeeding is the most lasting investment to the mother and the child's physical, cognitive, and social well-being and provides numerous health and development benefits (Hansen, 2016; Rollins et al., 2016). With the increasing participation of women in the labor market, returning to work presents a challenge for the continuity of the practice (Dagher et al., 2016; Monteiro et al., 2017).

Support for breastfeeding at work must integrate a set of maternity protection measures. The International Labor Organization (ILO) recommends that all countries implement convention No. 183 and maternity protection recommendation, 2000 (No. 191) to guarantee protection of maternity and work as minimum standards (Addati et al.,2014).

Brazilian laws guarantee women with employment ties support for motherhood and breastfeeding. This support has been evolving in line with the recommendations of the ILO and includes, as a mandatory, the right to daycare, two 30-minute breaks to breastfeed or pump during working time (Decreto-Lei nº 5.442, 1943), 16-week paid maternity leave (Constituição da República Federativa do Brasil, 1988). As optional, extending maternity leave to 24 weeks (Lei nº 11770, 2008) and the implementation of Breastfeeding Support Rooms (BSR) in companies (Ministério da Saúde, 2015), as part of the action Breastfeeding Working Woman (BWW).

The BWW action was created by the Ministry of Health in 2010, and inserted in 2015 in the National Policy for Comprehensive Child Health Care (Ministério da Saúde, 2018). This action aims to reinforce the legal support devices for breastfeeding and motherhood by ensuring continued breastfeeding after returning to work. The BWW action advocates for three axes: a) an extension of maternity leave to 24 weeks; b) establishment of daycare at the workplace and; c) the implementation of breastfeeding support rooms (BSR). The BWW foresees the training of health professionals from the Unified Health System (SUS) to become "tutors" responsible for informing, raising awareness and supporting public and private Brazilian institutions on the three axes of support for maternity and breastfeeding, especially the implementation of BSR.

Evidence indicates that BSR and breaks for breastfeeding increase by 25% the chances of breastfeeding up to six months (Rollins et al., 2016), decrease the likelihood of breastfeeding interruption, and increase the chance of continuity of breastfeeding and exclusive breastfeeding (Lee et al., 2015; Nardi et al. 2020).

It is also known that, by increasing breastfeeding rates, BSRs can contribute to achieving 8 of the 17 Sustainable Development Goals (SDG), also contributing to decent work and economic development (target 8) and gender equality (target 5) (De Souza et al., 2021).

Although not mandatory, BSR are a great low-cost strategy that encourages women to breastfeed, and in turn, enable them to maintain their human milk production levels, relieve breast discomfort during the workday, and safely store human milk for their child or donate to a human milk bank (Nardi et al., 2020).

The Ministry of Health has invested in training tutors to support the implementation of BSR throughout the country and to certify that all of them have a private and welcoming environment of 1.5 m^2 per chair, a water dispenser, a sink, and a freezer, preferably with a thermometer, to store human milk (Ministério da Saúde, 2015). After this initiative was launched, no studies were conducted on how these rooms work to help deploy them on a larger scale. Thus, the objectives of this study were

to analyze the profile of BSR in southern Brazil, gather data on the use and monitoring of these facilities, and the challenges and benefits of their implementation.

2. Methodology

2.1 Design

A descriptive cross-sectional study was carried out on BSR in the three southern states of Brazil. We contacted all 21 BSR certified by the Ministry of Health until December 2017 —three were located in the state of Rio Grande do Sul, two in Santa Catarina, and 16 in Paraná. BSR that went unused over the past six months were excluded.

2.2 Sample and data collection

The participants comprised BSR supervisors from the affiliated companies. An online questionnaire developed to collect data is disponible in Table 1.

We proceeded to contact BSR supervisors, registered in the Ministry of Health database, by phone. We introduced our study and invited the supervisors to participate in it. Once they agreed, we sent a request via e-mail to fill a questionnaire and a free, prior, and informed consent form. BSR supervisors had between 30 and 90 days to complete the online questionnaire (in .docx format) and return it alongside the signed informed consent form.

The questionnaire was applied between August 2017 and October 2019.

In Table 1 it is possible to observe the questions were asked for companies that have BSR. The questions were divided into parts related to the company's data, on the monitoring of BSR, the challenges and benefits observed, the receptivity of BSR in the company, perceptions about the BSR and the support received from the tutor.

Table 1 - Information Collected in Companies With Breastfeeding Support Rooms (N=16), 2017-2019, south Brazil

Information collect	Questions								
Company data	 Identification, address, and contact information Total employees of the company Daily working hours Inauguration date of the Breastfeeding Support Room Adoption of six-month maternity leave and 21-day paternity leave Whether the company has a daycare, funds daycare for mothers, or provides childcare assistance funds for employees Total number of female employees in childbearing age (ages 16 to 49) Type of activity developed by women in childbearing age: Number of employees who were on maternity leave in the year prior to the survey Breastfeeding support, promotion, and protection activities 								
Monitoring	 Is the BSR is active (has been used in the last six months)? Is there a record of the use of BSR or is initial registration is required before use? What is the proportion of employees who use the room? How many women have used the room in the last year? For how long, in average, do women use the room (in months)? Has the company surveyed the women who missed work due to illness of the child in the last 6 months? Has the company observed any change in the number of women who missed work due to illness of the child ill after the room was inaugurated in the last 6 months? Has the company carried out any comparative analysis on absenteeism due to illness of the child between female users and non-users of the room? 								
Challenges and benefits	Any challenges related to the use/maintenance of the room?Any benefits related to the use/maintenance of the room?								

Receptivity and perceptions	•	How was BSR received by your company's female employees? What is the employee's opinion of the company regarding the implementation of the room?
Tutor support	•	Has the company received support from their tutor in the last 6 months? If so, what kind of support?

Source: Authors.

2.3 Data analysis

The variables studied are expressed in absolute frequencies, relative frequencies, and central tendencies (median and confidence interval). All analyses were performed with the Statistic v.10.0 (Statsoft R) software. The characterization of the size of companies with SAA was carried out based on the number of employees, considering: large company with over 500 employees, medium-sized company with 100 to 499 employees and small company with 20 to 99 employees (Sebrae, 2013). The study was approved by the Ethics Committee of the Health Sciences Department of the university body, under Certificate of Presentation of Ethical Appreciation (CAAE) number 65401917.5.3004.5225.

3. Results

3.1 Sample characteristics

Sixteen BSR participated in the study. Thirteen were located in the state of Paraná (81.25%), two in the state of Santa Catarina (12.5%), and one in the state of Rio Grande do Sul (6.25%). Three BSR were excluded from the study because they had gone unused within the past six months and two did not agree to participate in the study. The 16 BSR belong to a total of 12 institutions, nine of which are located in the state of Paraná, two in Santa Catarina, and one in Rio Grande do Sul. One of the companies had five BSR certified by the Ministry of Health in Paraná; the remaining companies have one BSR each.

3.2 Company profile and women in the workplace

The BSR were certified by the Ministry of Health between 2014 and 2017, one (6.25%) in 2014, five (31.25%) in 2015, seven (43.75%) in 2016, and three (18.75%) in 2017. The results on the profile of the companies that have BSR can be seen in Table 2.

 Variable
 n (%)

 Type of company
 13 (81,25%)

 Public
 13 (81,25%)

 Private
 2 (12,5%)

 Non-profit
 1 (6,25%)

 Company size
 4 (25%)

Table 2 - Distribution of Breastfeeding Support Rooms According to Company Characteristics (N=16), 2017-2019,South Brazil

Private	2 (12,5%)
Non-profit	1 (6,25%)
Company size	
Medium	4 (25%)
Large	12 (75%)
Leave granted by the company ^a	
Six-month maternity leave	14 (87,5%)
20-day paternity leave	13 (81,25%)
Daycare/financial assistance ^b	
Company-owned	3 (18,75%)
Company-funded	2 (12,5%)
Childcare assistance	13 (81,25%)

Breastfeeding support, promotion, and protection actions		
Face-to-face communication	9 (56,25%)	
Remote communication	7 (43,75%)	
Flexible schedules	8 (50%)	
Maternity leave for premature babies	1 (6,25%)	
Financial support: babysitter aid	1 (6,25%)	
Working day		
4 to 6 hours	7 (43,75%)	
7 hours and 15 minutes	1 (6,25%)	
8 to 8 hours and 30 minutes	15 (93,75%)	
12 hours	3 (18,75%)	
Daily monitoring of the use of the BSR		
Yes	15 (93,75%)	
No	1 (6,25%)	
Absenteeism monitoring		
Yes	1 (6,25%)	
No	15 (93,75%)	

Note. a, b these correspond to the axes of the BWW program of the Ministry of Health, together with BSR. Source: Authors.

Regarding monitoring and use, 11 (68.75%) know how many employees use and have used the BSR. In addition to the monitored daily use presented in Table 2, in 11 BSR (68.75%), employees also must fill out an initial registration form to use the service.

In Table 2, we can observe the distribution of BSR according to the characteristics of the companies in the southern region of Brazil. Attention is drawn to the fact that most companies are public, large according to the number of employees, provide 6-month maternity leave, as well as 20-day paternity leave, and do not monitor absenteeism in the companies to assess any possible positive relationship with the implementation of BSR in their company.

Most companies that have BSR provide 8 hours workday 15 (93.75%). Most of the breastfeeding promotion, protection and support actions carried out are related to face-to-face communication 9 (56.25%), the permission for flexible schedules 8 (50%) and remote communication 7 (43.75%).

Table 3 presents the characterization of the BSR according to the profile of the women employees and how often they use the service, as well as the characteristics of the female employees of childbearing age. Regarding the use of BSR by working women, attention was drawn to the great difference in the median between women who go on maternity leave and women who use the rooms, the latter being smaller.

In table 3, we can see the total number per BSR and the median of all the rooms in relation to the number of women working in the company, of women with childbearing age over 16 years old who work in the company, the number of women who were on maternity leave in the previous year and of women who used the BSR in the year before the study.

In 12 (75%) of the BSR observed, women performed manual labor (factories/industries, laboratories, production lines, and fields), in five (31.25%), women were in public service (outpatient and/or hospital staff, nurses, nursing technicians, nutritionists, doctors, telephone operators, and teachers/student supervisors) and in 13 (81.25%), they had administrative and managerial tasks.

Variable/BSR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Median
																	(Minimum- Maximum)
Number of employees	450	3,500	139	1,578	4,890	397	3,151	719	308	200	433	496	1,800	1,700	562	955	640 (139- 4,890)
Number of women employees of childbearing age	178	580	119	360	1,991	149	1,048	302	39	22	142	337	599	159	298	477	300 (22- 1,991)
Number of employees on maternity leave in the year prior to the survey	11	48	3	35	184	8	38	16	5	1	4	161	33	21	16	18	17 (1-184)
Number of women who used BSR in the year prior to the survey	2	2	2	12	28	8	24	7	3	2ª	4	3	2	1	7	1	3 (1-28)

Table 3 - Characterization of Breastfeeding Support Rooms According to Their Use And the Profile of Women Employees (N=16), 2017-2019, south Brazil

Note. ^a During the data collection period, the Breastfeeding Support Room was being used by another employee with an older baby. Source: Authors.

3.3 Challenges and benefits of in breastfeeding support rooms

The challenges and benefits for the use and maintenance of BSR we identified are available in Table 4. We observed that BSR supervisors identified more benefits than challenges.

Table 4 - Difficulties and Potential for the Use and Maintenance of BSR Reported by Companies (N=16),2017-2019, south Brazil.

Categories	Description	n (%)	
Challenges			
Management	The BSR were implemented without internally standardized processes and responsible for the implementation, maintenance, monitoring, and management of the rooms.	5 (31.25%)	
Use	Low use of BSR, the company should encourage mothers to use the BSR and prolong breastfeeding	2 (12.5%)	
Benefits			
Encouragement of breastfeeding	Encouragement of breastfeeding and meetings with pregnant women	2 (12.5%)	
Awards	Awards and certificates related to the implementation of BSR	5 (31.25%)	
Appreciation of women	Promotion of working women	1 (6.25%)	
Environment	Comfortable, calm, and suitable environment to pump milk	1 (6.25%)	
Milk donation	Likelihood of mothers donating breast milk	1 (6.25%)	

Source: Authors.

Table 4 presents the description of the benefits of implementing the BSR and the challenges for maintaining the BSR in the companies participating in the study. The benefits are related to the incentive to breastfeeding, receiving awards, recognition of women, the environment and milk donation. Regarding the challenges for the maintenance of the BSR, issues related to management were reported, such as the lack of internally standardized processes, responsible for the implementation, maintenance, monitoring, and management of the rooms and the low use of BSR.

3.4 Reception of the breastfeeding support room among company employees

The reception of the BSR among company employees was positive. Some excerpts of feedback from company employees were: "the BSR was very celebrated"; "we were excited, threw a party"; "we applaud the initiative and understand its importance"; "it was very well-received, as a gesture of respect and understanding of our needs". Supervisors observed the recognition and satisfaction of the users.

3.5 Tutor support

Tutor support over the past six months was carried out in three BSR (18.75%) through lectures on breastfeeding for women of childbearing age and discussions with pregnant and lactating women about the importance of breastfeeding and techniques and care for breastfeeding. Thirteen BSR (81.25%) did not receive any support from their tutor.

4. Discussion

This study aimed to identify the profile of Breastfeeding Support Rooms in the southern states of Brazil to identify data on their use and monitoring, as well as challenges and benefits to their implementation. No similar studies on BSR have been carried out in Brazil.

We found that the benefits to the companies that implemented BSR in the three southern Brazilian states include the encouragement of breastfeeding and the appreciation of working mothers. However, there were challenges as to the standardization of internal processes for maintenance of the rooms, their infrequent use, and the difficulty in maintaining tutors trained by the Ministry of Health. Countries and companies seeking to implement BSR must be aware of these challenges and seek to avoid them through the measures we suggested.

The companies that have implemented BSR are, for the most part, public, and large and medium-sized enterprises, assessed by the total number of employees. Moreover, all companies carry out some type of activity for the promotion, protection, and support to breastfeeding, especially on World Breastfeeding Week; 87% of the participating companies comply with the three axes of support to maternity and breastfeeding that make up the BWW action. Therefore, these companies are aware of the subject and already have a culture that promotes and supports breastfeeding.

In order to expand the implementation of BSR and reach other types of companies, it is very important the union and collaboration between states, municipalities and local unions. This would lead to more employeers awareness regarding: 1) the importance of breastfeeding for mothers, children, and future generations, including reducing health costs and better adherence by women to work; 2) the international and national recommendations to support of maternity and breastfeeding in the workplace, including the axes of action of BWW; 3) the establishment of BSR with fewer funds; and 4) the supporting role of the tutor in the implementation and maintenance of BSR, among others.

The average of employees who used the BSR, three (1-28), was about five times lower than the median of employees who went on maternity leave, 17 (1-184). Among all women who went on maternity leave, approximately 17% used the BSR. Complementary studies should investigate women who did not use the BSR, since it may be related to the flexibility of working hours, commuting time, or the fact that women return to work occurs when babies are already eating complementary foods, which allows mothers to set schedules for face-to-face breastfeeding.

Some companies have established processes for internal communication about the existence of BSR to their employees, but this is not true for all companies. Thus, we suggest that an internal policy be developed to establish a continuous information flow for women employees about the existence of BSR. These could occur at key moments, such as after employment, during pregnancy, and after a post-maternity leave examination. Companies should also promote personal visitations in BSR for employees to get to know the facilities and educational activities for pregnant women and family members, in particular the partner who has great influence in supporting breastfeeding after returning to work (Tsai, 2014), and include questions about to practical issues on the family's routine after returning to work. In addition, events should be held to raise awareness on the benefits of breastfeeding, the importance of proper and healthy nutrition during the child's first two years of life and on how to organize a routine for the baby while returning to work, and pumping, storing, transporting, and presenting breast milk to the baby.

Workplaces can help working mothers understand the benefits of breastfeeding, which can drive them to keep up with the practice after returning to work (Tsai, 2013). Positive actions to stimulate breastfeeding in the postpartum for women who are returning to work include BSR in the workplace, short breaks for breastfeeding, maternity leave, professional counseling, and lactation management (Garvin et al., 2013; Dagher et al., 2016).

However, having a suitable place to pump human milk in the work environment does not guarantee its use (Tsai, 2013). The determinants of breastfeeding are multifactorial (Primo et al., 2016). Whether a supportive environment for breastfeeding is important for its practice among female employees is unclear. Women who breastfeed can also face other challenges when continuing to breastfeed (Tsai, 2013; Basrowi et al., 2018). Conflicts related to work and family responsibilities, time constraints, or conditions like stress, stress-related anxiety, and fatigue may interfere with their ability to combine work and breastfeeding.

Some challenges in establishing BSR were the need to standardize internal processes and select supervisors, maintenance, monitoring, and management of the use of rooms in companies. The most critical processes are related to monitoring and management, especially when the company has BSR in more than one branch. Organizational and managerial support are extremely important aspects of breastfeeding support in the workplace (Scott et al., 2019).

Several authors consider the importance of institutionalizing a written policy of promotion, protection, and support for breastfeeding with emphasis on continuous care (Payton et al., 2019; Bai, Gaits & Wunderlich, 2015; Johnson, Kirk & Muzik, 2015; Fernandes et al., 2018). The formal breastfeeding policies reaffirm the employer's willingness to breastfeeding support, encourage official communication to female employees about breastfeeding support and support practices in the workplace (Payton et al., 2019). A written policy may be broad or specific depending on the company, and include information about the organization, times, and places to pump in the workplace (Payton et al., 2019). This policy, by including the BSR, is also able to reliably establish the maintenance and upkeep of a pumping room.

In this sense, the implementation of the BSR should be formalized as an institutional strategy whose monitoring does not fall upon a single supervisor, at times overly invested in the subject. Instead, we recommend an internal committee or commission to guarantee the rights of women to maintain breastfeeding and babies to be breastfed. Thus, all employers, regardless of company size, must support breastfeeding in the workplace (Lennon & Willis, 2017) through a standardized institutional breastfeeding support program or policy that fits their budget (Dinour et al., 2017; Angeletti et al., 2018).

The public service official trained by the Ministry of Health should carry out and oversee tutoring activities on the BWW, in particular, to inform and support companies in the implementation and monitoring of BSR. The tutor may also encourage the development of an institutional policy of promotion, protection, and support for breastfeeding in companies, as well as suggest ideas of continuous actions that increase interaction with women to promote the use of BSR. In the present study, 13 BSR did not receive support from the tutor. This led us to reflect on the need for further studies to understand how the activities of the BWW are added to the professionals' working, what are the challenges and possibilities regarding the type of public function exercised and whether tutors are allowed to carry out activities alongside businesses.

The World Health Assembly has established the goal of increasing the rate of exclusive breastfeeding to 50% by 2025 and the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) has established the goal of increasing the rate of exclusive breastfeeding to 70% by 2030 (WHO & UNICEF, 2019). Globally, only 41% of babies under six months are exclusively breastfed. In Brazil, 48% of children are exclusively breastfed at 6 months (Universidade Federal do Rio de Janeiro, 2020).

In order to increase breastfeeding rates, a series of actions are needed to allow women to breastfeed after returning to work. Breastfeeding support rooms are considered a cheap and effective strategy that increases the rate of breastfeeding among women workers. Thus, this novel study demonstrates the importance of governments and institutions around the world, understand the benefits and challenges for the implementation, large-scale expansion and maintenance of breastfeeding support rooms and suggest solutions for these.

This study was limited to assessing the situation of BSR in only one area of the country. Data collection was based on a self-completed questionnaire, which made it difficult to further explore the perception supervisors had on challenges and benefits to BSR. Despite the limitations, this is the first study that analyzes the profiles of BSR in Brazil and points out important challenges for the expansion of this action on a larger scale.

5. Conclusion

The themes that arose in this study support the conclusion that are tutor benefits than challenges for the use of the rooms. The main challenges are related to the management process and low attendance. Although the role of the tutor has been

sparse, tutors are fundamental in supporting the awareness, management, and monitoring of BSR. Thus, this role must be revised and reinforced during the implementation process.

Thus, although this work has presented important results, it would be interesting to carry out future studies to observe the benefits and challenges of BSR in other regions of Brazil and studies that can better assess the involvement of trained tutors in supporting this strategy.

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