Contributions of the São-Borjense Mother-Baby Strategy to qualify the maternal and child health care network

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Abstract: Objective: to describe the contributions of the São-Borjense Mother-Baby Strategy to qualify the local maternal and child health care network. Method: this is an action research carried out in the municipality of São Borja, Rio Grande do Sul, between March/2018 and October/2019, after one year of implementation of the Strategy in that location. Data collected through ten focus groups and categorized by Strategic Focal Analysis, with the participation of local managers, health professionals and pregnant women, totaling 55 participants. Results: the data, organized and categorized, resulted in two categories: Contributions that transcend technical and professional practice and Contributions aimed at qualifying the São-Borjense Mother-Baby Strategy. Conclusion: the São-Borjense Mother-Baby Strategy contributed, in an affirmative and prospective way, to qualify the local maternal and child health care network, especially with regard to the relationships and interactions between professionals and pregnant women and (re)organization of flows and intervention processes in the network.

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Descriptors: Perinatal mortality; Perinatal care; Health status indicators; Quality indicators, Health care; Qualitative research

Resumo: Objetivo: descrever as contribuições da Estratégia Mãe-Bebê São-Borjense para a qualificação da rede de atenção à saúde materno-infantil local. Método: trata-se de pesquisa-ação desenvolvida no Município de São Borja, Rio Grande do Sul, entre março/2018 e outubro/2019, após um ano de implementação da Estratégia no referido local. Dados coletados por meio de dez grupos focais e categorizados pela Análise Focal Estratégica, com a participação de gestores locais, profissionais de saúde e gestantes, totalizando 55 participantes. Resultados: os dados, organizados e categorizados, resultaram em duas categorias: Contribuições que transcendem o fazer técnico-profissional e Contribuições com vistas à qualificação da Estratégia Mãe-Bebê São-Borjense. Conclusão: a Estratégia Mãe-Bebê São-Borjense contribuiu, de forma afirmativa e prospectiva, para a qualificação da rede de atenção à saúde materno-infantil local, especialmente no que se refere às relações e interações entre profissionais e gestantes e a (re)organização dos fluxos e processos de intervenção na rede.

Descritores: Mortalidade perinatal; Assistência perinatal; Indicadores básicos de saúde; Indicadores de qualidade em assistência à saúde; Pesquisa qualitativa

Resumen: Objetivo: describir los aportes de la Estrategia Madre-Bebé São-Borjense a la calificación de la red local de atención maternoinfantil. Método: se trata de una investigación-acción realizada en el municipio de São Borja, Rio Grande do Sul, entre marzo/2018 y octubre/2019, luego de un año de implementación de la Estrategia en ese lugar. Datos recolectados a través de diez grupos focales y categorizados por Análisis Focal Estratégico, con la participación de gerentes locales, profesionales de la salud y embarazadas, totalizando 55 participantes. Resultados: los datos, organizados y categorizados, resultaron en dos categorías: Aportes que trascienden la práctica técnica y profesional y Aportes orientados a calificar la Estrategia Madre-Bebé São-Borjense. Conclusión: la Estrategia Madre-Bebé São-Borjense contribuyó, de manera afirmativa y prospectiva, a la calificación de la red local de atención maternoinfantil, especialmente en lo que se refiere a las relaciones e interacciones entre profesionales y gestantes y (re)organización de flujos y procesos de intervención en la red.

Descritores: Mortalidad perinatal; Atención perinatal; Indicadores de salud; Indicadores de calidad de la atención de salud; Investigación cualitativa

Introduction

The maternal and child health area has undergone important advances over the past few years. Global estimates related to maternal mortality rates show a decline from 385/100,000 live births in 1990 to 216/100,000 in 2015, with 303,000 maternal deaths in 2015.\(^1\) This decline is associated, in part, with improvements established in low-income countries, although preventable maternal deaths continue to happen among the world’s poorest women.\(^2\)
In Brazil, the reduction in the maternal mortality rate was, between 1990 and 2015, from 143 to 62 maternal deaths/100,000 live births. The 56% reduction was recognized by the World Health Organization (WHO) due to the significant advances in public health policies, more specifically since the 1990s. According to data from the Mortality Information System, Brazil registered, in 2015, 1,738 cases of maternal death, including deaths caused by problems related to pregnancy, childbirth or those that occurred in the subsequent 42 days. In 2016, 1,463 cases were registered, representing a decrease of 16% in relation to the previous year.\textsuperscript{3-4}

Regarding infant mortality, there was a reduction, between 1991 and 2010, of about 58.94%, which has been related to the more favorable socioeconomic conditions in certain regions. Although the South and Southeast regions showed the greatest reduction in the infant mortality rate, in Brazil, there is a significant intraregional differential, and some municipalities in these regions also presented high numbers of infant deaths.\textsuperscript{5}

In Brazil, however, three important challenges remain, with characteristics of epidemics, which need to be faced in the next years: number of caesarean sections, prematurity and childhood obesity. There is no justification for cesarean rates that affect more than 50% of births, placing Brazil in a world leadership position. The epidemic of preterm births, partially attributable to unnecessary cesarean sections and the low quality of prenatal care, has short-term consequences, neonatal morbidity and mortality, and, in the long term, deficits in the intellectual development of premature children. The childhood obesity epidemic, on the other hand, has severe consequences in terms of morbidity from non-communicable diseases in adulthood.\textsuperscript{6-8}
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Given this scenario, the Ministry of Health, within the scope of the Unified Health System (Sistema Único de Saúde - SUS), has gradually implemented policies to reorient the model of care for childbirth and delivery with practices based on scientific evidence. In addition, it enabled measures to guide and qualify the maternal and child health care network. It is highlighted, in this sense, the improvements in the Basic Health Units mediated by the Stork Network (Rede Cegonha), in which the woman is followed from conception to prenatal, delivery and postpartum, and the child, over the first two years of life. The Stork Network has, among its objectives, to guide counseling processes for pregnant women about the importance of prenatal care, the benefits of normal childbirth in detriment of cesarean section, the advantages of breastfeeding.9-10

In this evolutionary path, qualitative and prospective studies are gaining relevance. The demands for evaluation have forced different health policies to create research designs and methodological contributions according to the diversity of fields and investment objects. Evaluative studies contribute, under this focus, in the identification of potentialities and weaknesses regarding an intervention or one of its components, with a view to (re)orientate decision making and support strategic planning through theoretical-methodological contribution.11-12

In this perspective, the São-Borjense Mother-Baby Strategy was conceived and implemented, in line with the National Childbirth Assistance Guidelines,13 in partnership with the managing authorities of the municipality of São Borja, located in the south of Brazil. Based on the above and with a view to qualifying the management and organization of the maternal and child health network, the question is: What are the contributions of the São-Borjense Mother-Baby Strategy to qualify the maternal and child health care network? Thus, the objective is to describe the
contributions of the São-Borjense Mother-Baby Strategy to the qualification of the local maternal and child health care network.

**Method**

This is action research, developed in a cooperative and participatory manner, from March 2018 to October 2019. The action research has become an important methodological tool for the development of new knowledge and practices in the area under investigation. The research made possible, in a constructive and interactive way, the multiplier participation of different actors involved in the maternal and child health care network of that municipality.

It should be noted that the São-Borjense Mother-Baby Strategy was conceived and implemented from an action research project, in partnership with local management authorities, as well as with the participation of professionals and users of public health services in that municipality, with the main objective of qualifying the organization and the attention in maternal and child health area in that municipality. The economy of the municipality of São Borja is characterized by agriculture and livestock. Demographic, economic and health data can be seen in Table 1, which follows:

**Table 1** – Demographic, economic and health characteristics of the municipality of São Borja. São Borja, Rio Grande do Sul (RS). 2019.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhabitants</td>
<td>61,670 (IBGE 2010)¹³</td>
</tr>
<tr>
<td>Population Density</td>
<td>17.05 Km² (IBGE 2010)</td>
</tr>
<tr>
<td>Demographic/Age Profile</td>
<td>Less than 15 years old = 22.14%</td>
</tr>
<tr>
<td></td>
<td>Between 15 and 64 years old = 68.25%</td>
</tr>
<tr>
<td></td>
<td>More than 65 years old = 9.60% (IBGE 2010)</td>
</tr>
<tr>
<td>Births per year</td>
<td>764 in the year 2018 (Civil Registry Office)¹⁴</td>
</tr>
<tr>
<td>Infant Mortality</td>
<td>7% reduction in the last 10 years (SMS, 2019)⁶</td>
</tr>
<tr>
<td>Maternal Mortality</td>
<td>90% reduction in the last five years (SMS, 2019)</td>
</tr>
<tr>
<td></td>
<td>Income per capita R$705.72</td>
</tr>
<tr>
<td>Economic factors</td>
<td>% Extremely poor 2.72</td>
</tr>
<tr>
<td></td>
<td>% Poor 8.98 (CENSUS 2010)</td>
</tr>
</tbody>
</table>

Source: Information from the Municipal Health Department of São Borja, RS, 2019.
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The study included five local managers, 27 health professionals from the 15 Family Health Strategy teams and 23 pregnant women assisted by these same units, in the municipality of São Borja, RS. Among the five local managers, there are the Mayor and the Municipal Health Secretary, the administrator and manager of nursing at the local hospital and the coordinator of Primary Health Care. Among the health professionals, there are four Nurses, one Physician and 17 Community Health Agents.

The research data were collected through ten (10) focus groups, thus constituted: a focus group of two meetings with the local managers; four focus groups, from one meeting each, with health professionals (six or seven professionals in each group); five focus groups, from one meeting each, with the pregnant women (four or five pregnant women in each group). The questions that guided the data collection were: How do you evaluate the São-Borjense Mother-Baby Strategy, implemented in your municipality? In your opinion, what are the main contributions of the São Borjense Mother-Baby Strategy? What suggestions would you give to qualify the Strategy in question? Other issues that arose during the process were also considered.

The participation of managers and health professionals took place through a formal invitation, based on a previous survey of those who had actively participated in the implementation process of the São-Borjense Mother-Baby Strategy in that municipality. Professionals on vacation or away from the service for any reason were excluded. Thus, all the guests participated in the planned groups. The pregnant women, in turn, were randomly selected through the registration forms, with the criterion of having participated in at least six prenatal appointments in 2019 and being over 18 years old.
The duration of meetings was approximately two hours and had the support of a mediator/facilitator, in order to focus on the proposed objective. The data were recorded with the permission of the participants and analyzed based on the Strategic Focal Analysis. Information related to maternal, neonatal and infant mortality rates, normal and cesarean deliveries rates and the number of prenatal appointments, carried out in the period, were validated in complementary statistical data, filed with the Municipal Health Department.

The Strategic Focal Analysis proposes the inclusion of research participants, both in the process of analysis and synthesis and in the prospective design of goals, with the purpose of expanding the apprehension and understanding of the phenomenon under investigation, in this case, the contributions of the Strategy to the qualification of the maternal and child health care network in the municipality. It was sought, in this path, to synthesize and analyze in a constructive and prospective way the contributions/potentialities identified in the investigative path. Finally, the synthesis data were taken up by the researchers in the light of the proposed theoretical-methodological framework, in order to delimit the analysis categories.

The research project was approved by the Research Ethics Committee, under number 2,993,555, on October 31, 2018. To maintain the anonymity of the participants, the statements were identified, throughout the text, with the participants' initials: GL1...5 (Local Manager); PS1...27 (Health Professional); G1...23 (Pregnant Woman).
Results

From the data organized and coded by the Strategic Focal Analysis, the following categories resulted: Contributions that transcend technical and professional practice; Contributions aimed at qualifying the São-Borjense Mother-Baby Strategy.

Contributions that transcend technical and professional practice

The care provided by the professionals was mentioned by the pregnant women as “wonderful”, “great”, among other adjectives. In this direction, the pregnant women highlighted, above all, the relational and interactive skills of health professionals. Several pregnant women mentioned, in their descriptions, the differentiated/humanized care of the Family Health Strategy teams, as follows:

_In my appointments, I can openly talk with the nurses [...] they make me feel very comfortable. I feel good in the unit._ (G12)

_Some things, still, can/should improve, such as scheduling exams [...] , but the relationship with health professionals is very good._ (G15)

A special emphasis was given by pregnant women to the reception of health professionals. In this relationship, the pregnant women felt respected and welcomed in their decisions, in addition to being responsible. Finally, they were shown to be involved and committed to the work of the professionals, although the pregnant women did not meet all the recommendations. One of these situations concerns the failure to regularly attend prenatal appointments. The pregnant women, however, demonstrate awareness of their omissions and the lack of regular attendance at scheduled appointments. They recognize as part of the network qualification process, as follows:
I was welcomed into the unit when I discovered pregnancy. And even if I don’t “obey” the health agent and miss some appointments, they continue to treat me well. (G2)

Everyone welcomes me very well. They are able to solve my doubts and helped me to understand the importance of having a well done prenatal. (G17)

I feel good when I come here [...] sometimes I’m sad at home and I remember that it’s a group day, then I improve my mood and come here to take care of my baby’s health. (G18)

In the same direction, health professionals recognized that the São-Borjense Mother-Baby Strategy contributed to the (re)signification of professional making, often reduced to technique and routines. They highlighted the importance of focus groups, in which they had the opportunity to reflect and evaluate their professional practice, according to the following statement:

For me, this Strategy is of great help. I was able to review many things about my professional practice and think about some things that need to be different. (PS11)

The meetings we held were very important. I realized that I was being very technical at work. I realized that many things can be different and much of what happens and/or not in health depends on our actions. (PS18)

With the strategy being carried out, it became easier to reach that woman who doesn’t care much about her health. Some do not even want to do prenatal care, but with the possibility of getting a bag with gifts for the baby they are excited to come. (PS22)

A highlight was given by health professionals to the reception of pregnant women. The professionals understood, throughout the focal meetings, that
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“welcoming the pregnant woman” requires respect, empathy and unique service. They realized that judging the pregnant woman for not attending any prenatal appointment can be considered an inhuman and disrespectful attitude.

*Embracement is an important role of nurses for us [...] health professionals, who need to work directly with people, it makes a big difference when we are able to welcome each pregnant woman in a unique way. As we welcome them, they open up more and trust us more.* (PS5)

*We easily judged the pregnant woman when she did not come for an appointment. The Strategy, especially the meetings, made us realize that not attending a prenatal appointment does not always mean negligence, but a need [...].* (PS19)

Local managers, in turn, highlighted the participation and commitment of professionals in the entire process, that is, from conception to implementation of the São-Borjense Mother-Baby Strategy. They recognized the initiative and support throughout the process, as the proposal was developed in a collaborative and dialogical way. In the speech of one of the local managers, it was evident that the success of a municipal initiative depends on the active and responsible participation of all the actors, when he mentioned: “The success of a municipal initiative depends on the active and responsible participation of all those interested who need to be heard and involved in the process”.

**Contributions aimed at qualifying the São-Borjense Mother-Baby Strategy**

The participatory process from conception to implementation of the São-Borjense Mother-Baby Strategy made it possible, in the words of managers and health professionals, to reduce maternal, neonatal and infant mortality rates, reduce cesarean section rates, increase the number of prenatal appointments, in addition to
expanding good practices in childbirth and birth care, due to the collaborative and responsible performance of all the actors involved.

*I see that we discuss professional attitudes, reorganize processes and workflows, promote actions for networking. Many things have improved, but others need to improve, such as cesarean rates, which are still high for the number of births.* (GL4)

*With the implementation of the Strategy, we improved the indicators related to maternal and child health in the municipality. I believe that everyone is more aware of what and how to proceed, but some things must improve. We still had six neonatal deaths up to the sixth day of life and nine fetal deaths in the municipality.* (PS13)

For local managers, the Strategy significantly contributed to the (re)organization of the maternal and child health care network. One of the leaders mentioned greater continuity and dialogue between the sectors and health services, although recognizing that the qualification of this process occurs gradually and permanently.

*We have improved a lot the organization of the network. Today professionals talk to each other and recognize their role in different sectors. This path is not ready, but we know where we want to achieve.* (GL3)

Qualifying the Strategy, in the opinion of health professionals, requires proactive and prospective actions in the medium and long term. They understand that the different processes and operational flows need continuous and permanent improvements. In addition, they highlighted the need for better organization of groups of pregnant women in the Family Health Strategies, based on more frequent
Contributions of the São-Borjense Mother-Baby Strategy to qualify the maternal meetings, with a view to strengthening reception and the professional-pregnant bond.

Prenatal care, in the words of health professionals, also needs to be qualified in order to compromise pregnant women in the autonomous search for their improvements. They recognize that the intervention methodologies need to be continually rethought and qualified, in order to promote dialogical and horizontal professional relationships, with a view to empowering pregnant women.

Both health professionals and pregnant women recognize that the medical obstetrical and pregnant bond needs to be strengthened, since each prenatal appointment is carried out with another physician, considering that this is the reference professional in the care of pregnant women, as follows:

_We do all the prenatal care with a physician and when the time comes for delivery, the shift is different. We are afraid, we are insecure, we do not know that physician._ (G20)

Another necessary improvement is related to cultural issues, more precisely to the meanings attributed to SUS by health users in general. The public health system is considered, for some pregnant women, as an inefficient system and, therefore, some do not seek it or consider it dispensable.

_It is observed that many mothers do not believe in SUS. They delay appointments and even the neonatal screening, do not seek information and wait for the Health Agent to visit your home, even if it takes a month. Other pregnant women would like the health agent to intensify their visits during the period of pregnancy, for the purposes of guidance and other referrals._ (PS23)

Other improvements signaled by health professionals are associated with logistics and adequate spaces for the care of pregnant women. Professionals
recognize that they lack their own space for the differentiated reception of pregnant women, considering the need to singularize each service.

Nowadays I realize that prenatal care has been complicated. A few years ago, there was a place of its own that served only pregnant women and worked very well, unlike today [...]. (PS2)

They also considered improvements related to the authorization of sterilization. Both health professionals and pregnant women mentioned that the authorization for sterilization by the public health system is effective, in most cases, after the pregnant woman has already delivered, which requires a new surgical procedure. They recognize that this procedure generates more costs for Public Agencies, in addition to greater discomfort, time and expenses for users.

With regard to cesarean section, there is a great difficulty in uniting the moment of delivery with sterilization, for example, this makes it difficult and requires a new surgery and more costs for Public agencies [...]. (PS5)

The contributions aimed at qualifying the São-Borjense Mother-Baby Strategy are mostly associated with the (re)organization of processes and operational flows, which demand the (re)orientation of professional being and doing. Such improvements require, as mentioned by managers and professionals, in addition to readjustments, a cultural change of all involved.

**Discussion**

In Brazil, just over three million children are born by year. These numbers can impact both positively and negatively on health indicators and the economy of a municipality, state and country. Each birth involves, on the part of the public health system, attention to mothers and babies regarding the prevention, diagnosis and
Contributions of the São-Borjense Mother-Baby Strategy to qualify the maternal treatment of gestational diseases, as well as strategies related to the child’s healthy development.\textsuperscript{5}

Although advances in the area of maternal and child health have been increasing and, in most cases, induced by federal agencies, important gaps persist at all levels of care. Even if the Ministry of Health has instituted, at least, eight prenatal appointments for more effective monitoring of pregnant women, this practice is still below the desired level, in most Brazilian states. In this sense, a study showed that a significant number of pregnant women do not go to prenatal appointment and, in other cases, health agents do not visit them regularly and, in others, the demand is greater than the offer, or even there is not an effective service network.\textsuperscript{16}

The previously mentioned demands can/should be identified and considered at the local level. In addition to inducing policies, at the federal and state level, it is important that municipalities organize and articulate themselves in order to design their own strategies, based on specific regional and local demands, such as the São-Borjense Mother-Baby Strategy.

Such initiatives require, however, the development of strategies and instruments for the planning, integration, management and regulation of a local health service network, in a perspective of complementarity, safeguarding the specificities and needs of each component. The strengthening of this conception also presupposes the (re)thinking of professional and management attitudes and postures in order to enhance the synergy between the different actors involved in the process.\textsuperscript{11,17}

It is necessary to consider, in this context of advances, the need to monitor and continuously evaluate health policies, in order to identify demands and qualify initiatives at the local and regional level and, thus, subsidize political decisions in the
allocation of SUS resources. Planning, management and evaluation of improvements related to the maternal and child health care network is a broad, current and meaningful theme for the different actors involved in the process.\textsuperscript{11-12}

The consolidation of the maternal and child health care network at the local, regional and national level still challenges the creativity of managers, health professionals and researchers, with regard to proposing strategies and experiences that demonstrate innovative intervention approaches, such as also to evaluate the process. Theoretical-methodological frameworks capable of encouraging the participation of all actors are gradually required,\textsuperscript{18} as explained by one of the managers: “the success of a municipal initiative depends on the active and responsible participation of all stakeholders who need to be heard and involved in the process”.

Starring strategies aimed at qualifying the maternal and child health care network means investing in health and, consequently, in the healthy development of a country.\textsuperscript{12} Although the focus remains on the imperative of equity in the unfinished agenda of preventable mortality associated with pregnancy and childbirth, it is essential to address the growing burden of diseases that threaten women throughout their life cycle as children, adolescents, mothers, grandparents, health producers and economic, social and human development. The maternal health agenda must consider an approach centered on the healthy living of women. The challenge is to continue to drive maternal health beyond pregnancy and childbirth, in order to enable all women to realize their potential in all facets of their lives.\textsuperscript{16}

Finally, in the present study, the aim is to provide the community in general with an unprecedented production, developed in a collaborative and prospective way, with different views and with the commitment to qualify the maternal and child health care network. In this way, the intention is to contribute to innovation,
Contributions of the São-Borjense Mother-Baby Strategy to qualify the maternal and strengthening and consolidation of the maternal and child health network at the local, regional and national levels.

The limitations of the study are associated with the low participation of medical professionals, whose participation was limited to focal meetings. Another limitation is associated with the availability of times to perform the proposed activities, both by health professionals and users, previously counted.

Conclusion

The São-Borjense Mother-Baby Strategy contributed, in an affirmative and prospective way, to qualify the local maternal and child health care network, especially with regard to the relationships and interactions between professionals and pregnant women and the (re)organization of intervention processes and flows in the network. Contributions are also associated with the (re)organization of operational processes and flows, although they demand increasing (re)orientation of professional being and doing.

The participation and commitment of health professionals in the whole process, that is, from conception to implementation of the São-Borjense Mother-Baby Strategy, were fundamental to achieve the results. The process, as a whole, demonstrated that the success of a municipal initiative depends on the responsible engagement of all actors.

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