

Maternal knowledge on child survival in the poorest areas of North and Northeast Brazil

Conhecimento materno em sobrevivência infantil: o caso de áreas pobres nas regiões Norte e Nordeste do Brasil

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Abstract

This study aimed to evaluate knowledge on child survival among mothers of children under five years of age living in nine municipalities in North and Northeast Brazil. A standardized questionnaire was used for home interviews of mothers visited by volunteers from the Pastorate of the Child and mothers not visited by the program (control areas). The association between independent variables and the outcome (visited versus not visited by the Pastorate of the Child) was evaluated using the chi-square test. Among the 752 mothers studied, 386 were visited by Pastorate of the Child volunteers and 366 were not visited. Mothers visited by the Pastorate of the Child, although poorer, showed better knowledge on monitoring child growth and identifying child development difficulties as compared to mothers from the control areas. Despite the better performance of mothers visited by the Pastorate of the Child volunteers, maternal knowledge on child survival in both groups was less than desirable. This hinders the identification of more serious cases, delays seeking medical care, and reduces the impact on child morbidity and mortality.

Child Development; Child Welfare; Mothers

Introduction

Absence of health care seeking and late seeking are associated with numerous infant deaths in developing countries. In these countries, easily treatable diseases like pneumonia and diarrhea are still the principal causes of illness and death among children under one year of age ¹.

This same morbidity and mortality pattern has been observed in Brazil, especially in the North and Northeast. In these regions of the country, one-third of all infant deaths result from these diseases and one-fourth are attributed to ill-defined causes ². Ill-defined causes are generally associated with deaths that occur without medical care or when care is sought too late, when it is no longer possible to precisely define the underlying cause of death ³.

A recent study in Sergipe State, Northeast Brazil, showed that 40% of children under five years classified as ill by their mothers in the previous two weeks were not taken to health services ⁴. Staying at home, they are either medicated by the mothers themselves or receive no treatment whatsoever. When situations that require taking the child to a health service are not readily recognized, the risk lies in seeking medical care too late, when little can be done for the child. Thus, it is crucial for mothers to recognize signs of severity in order to adequately manage the disease and thus reduce child morbidity and mortality, especially in the poorest regions.

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The Pastorate of the Child, a social action agency under Brazil's National Confederation of Catholic Bishops, through approximately 160,000 volunteers known as Pastorate of the Child leaders, make monthly visits to some 2 million children under six years of age and 100,000 pregnant women in some 4,200 municipalities in all the States of Brazil and the Federal District (Pastorate of the Child Information System. <http://www.pastoraldacrianca.org.br/pastcri-dev/>, accessed on 07/May/2007). During these visits, the Pastorate of the Child volunteers instruct and encourage the mothers on breastfeeding, proper diet, immunizations, prenatal visits, detecting signs of serious illness, and seeking health care, among other topics⁵.

The current article aims to evaluate mothers' knowledge on survival of children under five years of age living in poor areas in North and Northeast Brazil, comparing those visited versus not visited by Pastorate of the Child volunteers.

Methods

The study was conducted in 18 areas belonging to 9 of the 32 poorest municipalities in Brazil. These municipalities were chosen on the basis of data provided by UNICEF and the Pastorate of the Child. The areas belong to the municipalities of Macururé (Bahia State), Graça and Arneiroz (Ceará), Garrafão do Norte and Santa Cruz do Arari (Pará), Natuba and Mari (Paraíba), Caracol (Piauí), and São Pedro (Rio Grande do Norte). All of these municipalities have at least one primary health care unit in the municipality seat, with at least one physician, a nurse, two nurse technicians, and four community health agents. The physicians generally live outside these municipalities, in nearby larger towns or cities. Besides the Pastorate of the Child, none of them had any other kind of active nongovernmental organization. In terms of government social assistance programs, all of these municipalities had the Food Grant Program and the Program to Promote the Fight against Nutritional Deficiencies (ICCN, also known as the Milk Program). Data from this same evaluation showed that the coverage for the Food Grant Program varied from 1% in Garrafão do Norte to 33% in São Pedro; as for the ICCN, coverage varied from 6% in Santa Cruz do Arari to 46% in Mari. These programs were later recombined in the "Bolsa Família" or Family Grant Program.

This study included mothers or guardians of children under five years of age living in these areas, from July to September 2002. The study design was cross-sectional or prevalence-based⁶.

The sample size was calculated for a maximum acceptable error of 2.3 percentage points, with the outcome prevalence varying from 10% to 90%. Based on these parameters, the study should cover at least 649 mothers. This figure was increased by 10% to account for possible losses, resulting in a minimum sample size of 714 mothers.

The mothers visited by the Pastorate of the Child volunteers were chosen from a list provided by the local office of the Pastorate of the Child, which included the name of the volunteers working in those municipalities. Seven were chosen at random in each municipality and then visited by the study coordinator (T.S.G.). During this visit, the coordinator asked to see the "leader's notebook", which lists all the children monitored by that volunteer. To complete the number of mothers needed for the sample, it was decided to interview the mothers of the first 12 children listed in the notebook. If the Pastorate of the Child volunteer monitored fewer than 12 children, all the mothers were included in the study, and in this case other volunteers belonging to the same community were chosen.

The mothers from the control group were chosen based on the characteristics observed in the communities visited by the volunteers. Thus, the children under one Pastorate of the Child volunteer lived in an area with paved streets, brick-and-mortar houses, running water, and electricity, so that another area with the same characteristics in the same municipality was chosen by the study coordinator to serve as the control area, not visited by Pastorate of the Child volunteers. This control area also had to be as far as possible from the Pastorate of the Child areas in order to avoid cross-contamination of information provided by the Pastorate of the Child volunteers to the mothers. To choose these control areas, the local office of the Pastorate of the Child indicated which areas of that municipality were not visited by the volunteers. With this information in hand and accompanied by a locally hired guide, the coordinator approached these areas, and based on the previously cited characteristics, defined the "control area" for each of the Pastorate of the Child areas. Then, the entire area was mapped, and each of its blocks and corners was numbered. In the case of the countryside, the rivers, roads, and mountains were used to demarcate and number the area, and the households were visited consecutively until completing the number of children for the sample.

Six former students from the Course in Social Sciences at the Federal University in Sergipe with previous experience in this type of study were recruited to perform the interviews. The train-

ing consisted of reading the questionnaires and instructions manuals and conducting simulated interviews in pairs and in groups. Four students were hired, and two were left as backups.

Using standardized questionnaires, these interviewers collected information on the demographic characteristics of the mother (age, skin color, whether she lived with husband or partner, and number of residents in the household), socioeconomic status (complete years of schooling and family income in the month prior to the interview), housing and sanitation conditions (type of housing construction, type of flooring, number of bedrooms, running water, and electricity, type of indoor toilet, and home appliances), and knowledge on child survival (oral rehydration solution, growth and development, acute respiratory infections, breastfeeding and diet, basic immunization, and prenatal care).

In the Pastorate of the Child areas, with the *leader's notebook*, the interviewers went directly to the child's home and interviewed the mother, while in the control areas they visited the households consecutively starting at the initially select-ed corner (or point, in the rural area).

Based on the data in the Pastorate of the Child Information System (<http://www.pastoraldacrianca.org.br/pastcri-dev/>, accessed on 07/Jun/2005), in 2004, it was estimated that, on average, for every mother there were two children under five years of age. Thus, among the 168 children included in the study per municipality, it would be possible to find 84 mothers, thereby totaling 756 mothers in the nine municipalities. This number would be sufficient to reach the minimum target sample size, namely 714 mothers.

At the end of each day of work, the completed questionnaires were coded by the interviewers themselves and turned in to the coordinator, who sent them for final review and double keying-in at the Federal University in Rio Grande (FURG), in Rio Grande do Sul State, Brazil.

For logistic reasons, the training was held in the interviewers' home town, namely Aracaju, Sergipe State. On the outskirts of this city, in an area similar to that soon to be covered in the study, 28 questionnaires were completed. Confidentiality was guaranteed to all the mothers concerning the information provided by them.

Quality control of the interviews was done by the study coordinator using immediate review of the questionnaires and partial repetition of the interviews. A specific questionnaire containing key questions was prepared to be used in this stage. The interviews to be repeated were selected at random or when some information appeared inconsistent. Five per cent of all the inter-

views were partially repeated, and no important difference was found between the information collected by the interviewer and that obtained during the quality control.

The data were keyed in twice by different workers, compared, and corrected. All these stages were performed using Epi Info 6.04 (Centers for Disease Control and Prevention, Atlanta, USA). Next, these data were transferred to Stata 7.0 (Stata Corp., College Station, USA), where lists were obtained of the frequencies of all the variables, and bivariate analyses were performed, consisting of measuring the association between the different independent variables and the dependent variable, namely whether or not the mother was visited by the Pastorate of the Child volunteers. This association was analyzed with the Pearson chi-square test⁷.

The research project was approved by the Ethics Committee on Health Research at FURG.

Results

The study identified 765 mothers of children under five years in 18 areas in the nine target municipalities, and 752 were interviewed. This represents 1.7% losses from the total sample, or 1.5% in the Pastorate of the Child areas and 2.2% in the control areas.

The number of mothers per municipality varied from 31 in Garrafão do Norte to 54 in Arneiroz. This can be attributed to losses, the fact that a given interviewer did not know the exact number of interviews already held by the other interviewers, the large distance between households, and the possible differences in birth rates between these places. Importantly, the study was originally designed to study 84 under-five children per municipality. Therefore, there was no concern with the number of mothers identified.

Table 1 shows that the majority of mothers studied in the two areas were at least 30 years old, mixed, and married or living with a partner. The mothers in the Pastorate of the Child areas, on average, were two years younger than the mothers in the control areas. This is explained by the fact that in the Pastorate of the Child group, there were 31% more adolescents (mothers \leq 19 years of age; 14% versus 10.7%) and 56% fewer older women (mothers \geq 40 years; 11.9% versus 18.6%) as compared to the control area. Table 1 also shows that the mothers had both low schooling and family income. Most mothers lived in brick-and-mortar houses with cement floors. The most common home appliances were: gas or firewood (or charcoal) stove, radio, and television. Treated

Table 1

Demographic and socioeconomic characteristics of families of children under five years of age living in poor areas of North and Northeast Brazil, 2002.

Indicator	Area		Total (%)
	Pastoral (%)	No Pastoral (%)	
Age (complete years) [p = 0.051]			
≤ 19	14.0	10.7	12.4
20-29	50.8	47.0	48.9
30-39	23.3	23.8	23.5
≥ 40	11.9	18.6	15.2
Mean (standard deviation)	28.3 (9.7)	30.2 (10.7)	29.2 (10.2)
Skin color [p = 0.135]			
White	27.2	33.1	30.0
Mixed	65.8	58.7	62.4
Black	7.0	8.2	7.6
Living with husband/partner [p = 0.185]	80.6	82.0	81.2
Schooling (years) [p = 0.045]			
None	19.9	18.8	19.4
1-3	32.9	28.7	30.8
4-8	36.7	34.4	35.4
≥ 9	10.9	18.0	14.4
Mean (standard deviation)	3.9 (3.4)	4.4 (3.7)	4.1 (3.5)
Monthly family income (times minimum wage) [p = 0.022]			
< 1	61.1	56.3	58.8
1 to 1.9	27.5	25.1	26.3
≥ 2	11.4	18.6	14.9
Mean (standard deviation)	0.91 (0.92)	1.10 (1.13)	1.00 (1.03)
Type of housing construction [p = 0.713]			
Brick-and-mortar	64.5	66.2	65.4
Wood	14.9	15.6	15.3
Mud-and-wattle	20.4	18.0	19.2
Home appliances			
Radio [p = 0.183]	64.0	68.6	66.2
TV [p = 0.016]	59.8	68.3	64.0
Refrigerator [p = 0.067]	31.3	37.7	34.4
Gas stove [p = 0.001]	72.5	83.1	77.7
Wood/Charcoal stove [p = 0.067]	72.3	66.1	69.3
Indoor running water [p = 0.032]	32.2	39.6	35.8
Treated drinking water [p = 0.974]	26.9	27.0	27.0
Type of toilet [p = 0.074]			
Flush	19.4	26.5	22.9
Not flush	30.0	31.1	30.6
Other	13.5	11.7	12.6
None	37.0	30.6	33.9
Total	100.0 (N = 386)	100.0 (N = 366)	100.0 (N = 752)

indoor running water and flush toilets were only found in slightly more than one-fourth of households. Mothers living in control areas showed a significant advantage ($p < 0.05$) as compared to

mothers in areas visited by the Pastorate of the Child volunteers.

Table 2 shows that practically all the mothers were familiar with the "child's health card" and

Table 2

Knowledge on child's health card, occurrence of pneumonia, and basic immunization among mothers of children under five years of age living in poor areas of North and Northeast Brazil, 2002.

Indicator	Area		Total (%)
	Pastoral (%)	No Pastoral (%)	
Familiarity with child's health card [p = 0.226]	99.7	98.6	99.2
Use of card			
Recording weight [p = 0.001]	70.0	58.4	64.4
Recording vaccines [p = 0.052]	93.2	96.4	94.8
Monitoring child development [p = 0.412]	23.1	25.8	24.4
As an ID document [p = 0.838]	8.1	10.0	9.0
Correctly interpreted growth for child			
Losing weight [p = 0.493]	26.7	28.1	27.4
Gaining weight [p = 0.502]	31.3	28.4	29.9
Mothers that think a child with intercostal and lower chest wall indrawing may have pneumonia [p = 0.355]	20.3	19.1	19.7
6-month-old infant in mother's arms with respiratory rate 60bpm may have pneumonia [p = 0.036]	14.0	22.1	17.9
Diseases for which an infant should be vaccinated by six months of age *			
Poliomyelitis [p = 0.621]	16.1	19.8	17.9
Measles [p = 0.761]	14.6	11.9	13.2
Whooping cough [p = 0.998]	3.8	3.8	3.8
Tetanus [p = 0.462]	2.8	4.6	3.7
Diphtheria [p = 0.998]	3.5	3.6	3.6
Hepatitis [p = 0.564]	7.5	9.0	8.2
Tuberculosis [p = 0.464]	5.9	8.4	7.1
Flu [p = 0.858]	0.6	1.2	0.9
On BCG vaccine			
Knows the vaccine [p = 0.730]	97.4	97.0	97.2
Says it protects against tuberculosis [p = 0.766]	6.4	7.0	6.7
Knows how and where BCG shot is applied [p = 0.584]	61.7	59.5	60.7
Scar as proof of vaccination [p = 0.491]	36.4	39.4	37.8
Able to properly prepare oral rehydration solution with premeasured packet [p = 0.636]	41.0	39.1	40.1
Able to properly prepare oral rehydration solution with measuring spoon [p = 0.461]	32.3	29.6	31.1
Total	100.0 (N = 386)	100.0 (N = 366)	100.0 (N = 752)

* Spontaneous report.

were aware that it was used to record vaccinations, but few knew about the card's other uses. In relation to its use for monitoring child growth, the mothers in the Pastorate of the Child areas performed significantly better (70% versus 58% in the control areas). As for interpretation of the growth curves, having a child losing weight versus another gaining weight on different cards, few mothers in either group could make the comparison correctly.

Mothers' recognition of an episode of pneumonia based on the presence of intercostal and lower chest wall indrawing and respiratory rate was also deficient in both groups, although the performance was slightly better among mothers visited by the Pastorate of the Child volunteers. The same was observed for basic immunization. The most widely known vaccines in both groups were Sabin and measles. In the case of BCG, practically all of the mothers were familiar

with the vaccine and knew where and how it was administered, but did not know which disease it protects against. Slightly more than one-third of them mentioned that previous BCG vaccination could be checked by the presence of the scar on the child's arm. Finally, slightly more than 40% of all the interviewees could explain how to properly prepare oral rehydration solution using the premeasured packet from the *Central de Medicamentos* and only 30% knew how to prepare the solution using a measuring spoon. Table 2 shows these percentages.

Table 3 shows that for the vast majority of mothers, a child that is unable to stand alone at 18 months of age should be taken to the doctor. However, only two-thirds said that a child that cannot speak a single whole word at 18 months should be taken to the doctor. On this last item, the mothers in the Pastorate of the Child areas showed a significant advantage. This same table shows that only one in three mothers replied that to give water, tea, or juice to a breastfed child could be harmful to the child's health. However,

some two-thirds of mothers in both areas stated that all infants should breastfeed exclusively until six months of age.

Table 4 refers to basic knowledge on prenatal care. Some 80% of all the interviewees stated that prenatal care should begin in the first trimester of pregnancy, that the pregnant woman should have at least three prenatal visits, and that all pregnant women should receive at least one dose of vaccine against tetanus in the first pregnancy.

Discussion

This study showed that knowledge on basic child health measures among the sample of mothers was quite poor. It also showed that mothers living in the Pastorate of the Child areas were more knowledgeable about the use of the health card for monitoring growth, identifying pneumonia based on counting the child's respiratory rate, and difficulties in speech development. Mothers living in areas not visited by the Pastorate of the

Table 3

Knowledge on child development among mothers of children under five years in poor areas of North and Northeast Brazil, 2002.

Indicator	Area		Total (%)
	Pastoral (%)	No Pastoral (%)	
Children 18 months old that cannot stand by themselves should be taken to the doctor [p = 0.578]			
Yes	94.0	95.6	94.8
No	4.1	3.3	3.7
Doesn't know	1.8	1.1	1.5
A child 18 months old that cannot speak a whole word should be taken to the doctor [p = 0.024]			
Yes	73.1	68.3	70.7
No	20.5	27.9	24.1
Doesn't know	6.4	3.8	5.2
Receiving water, tea, and/or juice in the first month of life when the child is still breastfeeding is [p = 0.654]			
Good	45.6	45.9	45.7
Bad	37.0	34.1	35.6
Indifferent	12.7	15.3	14.0
Doesn't know	4.7	4.4	4.5
Mother's breast milk should be offered exclusively until what age [p = 0.219]			
< 6 months	16.6	21.4	18.9
6 months	63.5	61.4	62.5
> 6 months	19.8	17.1	18.5
Total	100.0 (N = 386)	100.0 (N = 366)	100.0 (N = 752)

Table 4

Knowledge on prenatal and childbirth care among mothers of children under five years of age in poor areas of North and Northeast Brazil, 2002.

Indicator	Area		Total (%)
	Pastoral (%)	No Pastoral (%)	
Month of pregnancy in which woman should begin prenatal care [p = 0.089]			
1st-3rd	81.2	83.4	82.3
4th month or later	12.8	8.3	10.6
When she discovers she's pregnant	6.0	8.3	7.1
Recommended number of prenatal visits [p = 0.977]			
1-5	20.2	19.7	20.0
6-8	38.9	38.8	38.8
≥ 9	40.8	41.5	41.1
Number of doses of tetanus vaccine that pregnant woman should receive during prenatal care in first pregnancy [p = 0.613]			
At least one	88.5	85.9	87.3
Doesn't know	11.5	14.1	12.7
Total	100.0 (N = 386)	100.0 (N = 366)	100.0 (N = 752)

Child volunteers had more schooling and higher family incomes, and their homes were more likely to have refrigerators and gas stoves. All these differences were statistically significant ($p < 0.05$).

When interpreting these findings, it is necessary to keep in mind that the study was non-random, with mothers coming from only some of the areas in these municipalities. Therefore, the data shown here are not representative of either these municipalities or the larger geographic regions to which the mothers belong. Neither can one guarantee that the observed differences result exclusively from the work by the Pastorate of the Child volunteers, since other interventions like the work by community health agents were not evaluated. However, all of the municipalities have practically 100% coverage by the community health agents, which suggests that the effect of their work occurred (or failed to occur) both in areas visited by the Pastoral volunteers and those not visited. As for social support programs, there were two, both provided by the Federal government: the ICCN and the Food Grant Program. As discussed previously, coverage by these programs varied considerably between municipalities, but was slightly higher among children served by the Pastorate of the Child volunteers. In this group, while the ICCN and Food Grant Program reached 30% and 10%, respectively, in the group not visited by the Pastorate of the Child volunteers the proportions were 24% and 7%. These differences

were not statistically significant. In addition, it appears unlikely that such an intervention (limited to the distribution of food products without any complementary educational activity) could have had any impact on maternal education for child health. Besides, better knowledge on child survival among mothers visited by Pastorate of the Child volunteers as compared to control areas with similar socioeconomic conditions had already been described before the community health agents existed⁸. Even so, they may be useful for estimating indicators in areas with similar characteristics to those studied here.

The fact that there were more young mothers in the Pastorate of the Child group is because the "Manual for Pastorate of the Child Leaders" (*Guia do Líder da Pastoral da Criança*)⁵ assigned priority to mothers at greater risk, in this case adolescents. The guidelines recommend focusing greater attention on pregnant women with lower socioeconomic status and experience and those that receive less support from their families and/or husbands or partners. These are generally younger mothers, which could explain the larger proportion of them in the group covered by the Pastorate of the Child. The volunteers' choice to focus on needier mothers was already demonstrated in another study on the Pastorate of the Child Program⁸.

Child growth monitoring has been widely used in Brazil, especially in primary care services.

At the household level, such monitoring is done by the community health agents and Pastorate of the Child volunteers. Weighing children is a mandatory activity for the Pastorate of the Child volunteer. Without this information it would be impossible to monitor the children's nutritional status. When this information is not complete, the Primary Health Care Follow-up Sheet (FABS in Portuguese), a basic data collection tool for the Pastorate of the Child, is returned to the volunteer for proper completion. Due to the importance assigned to this item, it is possible to explain the better performance by mothers visited by the Pastoral volunteers in both use of the card and recording the child's weight.

In relation to the low percentage of correct answers on the interpretation of growth curves, one can suggest that mothers feel that the child is growing adequately when he or she shows weight-for-age between the 10th and 90th percentiles. Thus, according to the mothers, the child in curve 1, between these two percentiles but losing weight, did not need to be referred to the health service, while the child in curve 2, below the 10th percentile but clearly gaining weight, needed to be taken to the health service. According to the current study, children only needed to be taken to the health service if they were losing weight, regardless of their percentile.

Evaluation of the mothers' knowledge on immunization appears to suggest that the most important thing for the mother is that her child receives the benefit, in this case the vaccine, regardless of which disease (or diseases) it protects against. For example, no more than 20% of the mothers could specify against which diseases a child should be vaccinated by six months of age, although by that age some 60% of the children had already received at least three doses of Sabin and DPT and one dose of BCG⁹. This idea is consistent with the fact that nearly all of the mothers had already heard of the BCG vaccine, but only one in 15 could say against which disease this vaccine protects.

In relation to breastfeeding and diet, the majority of the mothers had a theoretically correct opinion on breastfeeding duration. In this study, some two-thirds stated that a child should be breastfed exclusively until six months of age, even while half contended that it is good to give other liquids to a one-month-old infant while still nursing. Thus, a large share of the mothers had the correct knowledge, but either failed to apply it or did so ineffectively.

The better performance by mothers in the Pastorate of the Child areas in relation to recognizing speech development delays was due to the fact that child development is one of the prior-

ity areas for action by the Pastorate of the Child volunteers, as specified in the Manual⁵.

Interestingly, the mothers had limited knowledge for recognizing pneumonia based on identification of intercostal or lower chest wall indrawing or counting the respiratory rate, proper preparation of oral rehydration solution, or basic prenatal care^{10,11,12,13}. Pneumonia is the principal cause of death in early childhood, diarrheic diseases are still endemic in this region, and the number of prenatal visits is the lowest in Brazil^{2,11}.

Although the mothers monitored by the Pastorate of the Child volunteers had worse socioeconomic status, they showed better knowledge on child health, for various child health-related indicators. According to the leader's manual⁵, these indicators are part of the content that Pastorate of the Child volunteers are expected to communicate to the mothers during the home visits and on the *Day for Celebration of Life*, a monthly meeting in which mothers and volunteers meet for joint activities aimed at full child development. This technically appropriate and highly didactic content and the individual visits and collective meetings appear to explain the better performance demonstrated by mothers monitored by the Pastorate of the Child volunteers. However, better knowledge has not proven sufficient to significantly improve child health indicators in these communities.

The lack of greater impact on child health indicators by either the volunteer or the mother in areas covered by the Pastorate of the Child deserves more in-depth investigation. It is widely known that the Pastorate of the Child Program invariably works with the poorest, and the poorest are those that benefit the most from the supply of more effective measures. Increasing the effectiveness of Pastorate of the Child volunteers could reduce the morbidity and mortality rates among some two million children around Brazil, a highly desirable goal.

Resumo

Este estudo teve por objetivo avaliar o conhecimento em sobrevivência infantil entre mães de menores de cinco anos residentes em nove municípios das regiões Norte e Nordeste do Brasil. Aplicou-se questionário padronizado no domicílio para mães acompanhadas pelos líderes da Pastoral da Criança e não acompanhadas (áreas-controle). A associação entre as variáveis independentes e o desfecho (receber ou não visita dos líderes da Pastoral da Criança) foi avaliada pelo teste do qui-quadrado. Dentre as 752 mães estudadas, 386 eram visitadas pelos líderes da Pastoral da Criança e 366 não eram visitadas. Mães visitadas pelos líderes da Pastoral da Criança, apesar de mais pobres, apresentaram melhor conhecimento sobre monitoração do crescimento infantil, identificação de pneumonia e dificuldade no desenvolvimento em relação às mães das áreas-controle. Apesar do melhor desempenho entre mães visitadas pelos líderes da Pastoral da Criança, o conhecimento materno em sobrevivência infantil para todas elas ficou aquém do desejado. Isso dificulta a identificação dos casos de maior gravidade, retarda a busca de cuidados médicos e reduz o impacto sobre a morbimortalidade infantil.

Desenvolvimento Infantil; Bem-Estar da Criança; Mães

Contributors

J. A. Cesar conceived the study design, conducted the data analysis, and drafted the article. A. C. Diziekanik and P. R. P. Ribeiro participated in the data analysis and final draft. T. S. Gonçalves assisted in preparing the research instrument, data collection, and final draft. N. A. Neumann contributed to the elaboration of the research project, data analysis, and drafting of the article.

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