ABSTRACT

**Aim:** To identify the care provided at home aimed at the promotion of child health in Brazil. **Method:** Integrative review of articles published in Portuguese, English and Spanish in MEDLINE, CINAHL and LILACS, using the descriptors infant, infant care, health promotion, family, child health and child welfare. A total of 11 items were selected. The results were presented according to the domain of Self-Efficacy in Infant Care Scale - SICS. **Results:** The care evidenced in the studies falls in the fields of general health care, development promotion, safety and diet. **Discussion:** The association of popular features and allopathic therapy, in addition to difficulties in relation to food, raise the need to address care actions that promote child health in health education activities. **Conclusion:** The care evidenced in most of the studies aims to meet health needs in general and children’s nutrition.

**Descriptors:** Infant Care; Child Health; Health Promotion.
INTRODUCTION

Care practices are transmitted across generations. During maternity, these practices are full of symbols and meanings, and can express the perception of health and disease, and the social roles that are defined as a result of the birth experience(1).

Mothers usually take as their role the provision of care, learning it from other members of the family and community(2). In addition to feeding, they pay attention to meeting the biological needs of their children, bathing them, changing diapers and clothes, taking care of the umbilical stump, calming crying and understanding the reasons that lead to crying(3).

In some cases the mother feels insecure in providing care. A study of skin lesions in newborns and infants showed that 25.7% of the mothers reported insecurity and / or fear regarding the care of their baby(4).

An opportune time for mothers / fathers (or guardians) to diminish their doubts is during a routine visit, which consists in monitoring the healthy child with a focus on health prevention and promotion, in order to stimulate an exchange of experiences and overcome difficulties(5).

In this consultation are investigated, among others, practices about child hygiene, habits adopted for the provision of care, and the difficulties encountered(6). It should contain science-based guidelines in order to contribute effectively to the inclusion of health promotion actions for caregivers, reinforcing their personal skills(7).

The guidelines should not be limited to the transmission of information, but occur in a shared way through the exchange of knowledge, based on needs, beliefs, representations and life stories(8). In this sense, it is important to consider popular knowledge in the care provision of children in Brazil, and associate it with scientific evidence for child health promotion.

Promoting care for satisfactory child development involves aspects of welfare, housing, work, food, hygiene, leisure, education, health, social participation and security - which are the basis of primary child healthcare(9). Health education can enable the reconstruction of knowledge in order to promote the autonomy of mother / father in carrying out care practices for children at home(7).

Most of the literature produced does not address the completeness of child care(6,9). Investigating these publications and gathering the results, while considering the care practice of mothers and identifying popular knowledge used by families(2), can provide support to nurses in the planning of child health promotion strategies. Therefore, the study presented here aims to identify the care provided at home, aimed at the promotion of children’s health in Brazil.

METHOD

An integrative literature review to synthesize multiple published studies of the issue and identify gaps that need to be filled with new studies(10).

To operationalize the review we adopted the following steps in this order: 1- theme identification and selection of the research question; 2- establishment of criteria for inclusion and exclusion of studies / sampling; 3- definition of information to be extracted from the selected studies / categorization; 4- assessment of included studies; 5- interpretation of the results; and 6- presentation of the review / synthesis of knowledge(10).

The survey was conducted in order to answer the question: what are the care measures provided at home that aim to promote child health in Brazil?
The online search was conducted in the Latin American and Caribbean Health Sciences Literature (LILACS), in the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and on the website of the US National Library of Medicine (MEDLINE). We used the following science health descriptors (DeCS) in Portuguese: *Lactente, Cuidado do lactente, Promoção da saúde, Família, Saúde da criança e Bem-estar da criança*, with their respective standard translation from the Medical Subject Heading (MESH): *Infant, Infant care, Health Promotion, Family, Child health* and *Child welfare* and Spanish: *Lactante, Cuidado del lactante, Promoción de la salud, Familia, Salud del niño, Bienestar del niño*.

The research was carried out from October 1st to 31st 2013; no limits on the year of publication were established, due to the formulated research question, the possible influence of beliefs and taboos in childcare passed between generations, and in order to ensure a broad search for evidence.

Studies were selected according to the following inclusion criteria: scientific articles published in English, Portuguese or Spanish that addressed the care provided at home, which was aimed at the promotion of the health of children three years-old or younger, carried out in Brazil, and fully available on the selected databases, or through contact with their authors by electronic address or virtual shopping. We considered only studies with children under three years of age, as, due to their immaturity in taking care of themselves, they would require care from their guardians\(^\text{11}\). Reports of informal cases, book chapters, reflective articles, dissertations, theses, newspaper reports or editorials with scientific character, systematic and integrative reviews, and articles that did not show satisfactory methodological quality were excluded. Articles aimed at the care of premature children were also disregarded, because as they have anatomical and physiological characteristics that distinguish them from newborns at term, there is a need for special care\(^\text{12}\).

We started with the MEDLINE portal using the advanced form with a combination of descriptors. This was followed by a search in CINAHL and LILACS. The search was conducted by descriptors individually; then cross references were made using the “and” Boolean operator among the descriptors. After this, 1,803 publications were found. (Table 1)

Duplicate publications were considered only once according to the following hierarchy: MEDLINE, CINAHL and LILACS. For the selection of studies, a reading of the titles and abstracts of the articles was performed first, excluding those that did not contemplate the inclusion criteria. Then we conducted a full reading of the selected publications, data collection and assessment of methodological rigor.

Data collection was conducted with the use of a validated instrument and adapted for this study in a way to include the following items: article identification (title, journal, database, authors, country, language, year of publication, institution headquarters of study and type of journal); assessment of the introduction and objectives; methodological characteristics (study design, sample collection and analysis of data); description and analysis of the results, and conclusions\(^\text{13}\).

In assessing the methodological rigor of the studies we used the instrument adapted from the Critical Appraisal Skills Programme (CASP), which consists of ten scoring items (10 points maximum) covering the following issues: the study objectives, adequacy of the methodological design type of study, the methodological design coherence and the definition of the participants, data collection detailing, relationship between researcher and researched, compliance...
with ethical considerations, data analysis rigor, clarity of presentation of the results and importance of research(14).

It is important to note that this instrument classifies articles on two levels (A and B) according to the points received: level A, as articles that get between 6 and 10 points (good methodological quality and reduced bias); and level B, ones that get up to 5 points (satisfactory methodological quality, but with increased risk of bias)(14). The eleven articles selected in this review were classified as level A. One article was excluded from the study since it did not present good methodological quality, obtaining the B classification.

For the evaluation of the level of evidence a seven-level rating was used: level 1- systematic review or meta-analysis of relevant randomized controlled trials or derived from clinical guidelines based on systematic reviews of randomized controlled trials; level 2- derived from at least one well designed randomized controlled clinical trial; level 3- well-designed clinical trials without randomization; level 4- well designed cohort and case-control studies; level 5- systematic review of descriptive and qualitative studies; level 6- descriptive or qualitative study; and level 7- opinion of authorities and / or expert committees report(15). At the end of these stages, 11 original research articles were included.

The results were categorized in accordance with the Self-efficacy in Infant Care Scale - SICS(16), which assesses self-efficacy in child care, according to the domains of development promotion, and involves the stimuli, affectionate interaction and understanding the needs of the child; general health care, in order to prevent injuries and actions in case of illness; and security, which involves measures to prevent home accidents, and health problems and care regarding children's diet, from the cleanliness of utensils to adequate food for their age.

RESULTS

The sample consisted of 11 studies. The process of selecting the articles is outlined in Figure 1.

**Figure 1** - Flowchart of study selection process. Recife, 2013.

<table>
<thead>
<tr>
<th>Studies found in databases from the association of descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDLINE: 1,210</td>
</tr>
<tr>
<td>CINAHL: 505</td>
</tr>
<tr>
<td>LILACS: 88</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excluded studies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not answer guiding question: 885</td>
</tr>
<tr>
<td>Did not meet pre-established criteria: 892</td>
</tr>
</tbody>
</table>

| MEDLINE: 11 |
| CINAHL: 12 |
| LILACS: 04 |

<table>
<thead>
<tr>
<th>Excluded studies: 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not meet the scientific rigor / B rating: 01</td>
</tr>
<tr>
<td>Did not answer guiding question: 03</td>
</tr>
<tr>
<td>Did not meet pre-established criteria: 12</td>
</tr>
</tbody>
</table>

| Included studies: 11 |

Source: Authors’ research, 2013

**Scientific production profile**

Of the studies included in this review, there was a predominance of publications in nursing journals, accounting for six studies in three national journals\(^5,17\) to \(^21\), two studies in medical journals\(^22,23\), one from public health\(^24\) and one in the area of nutrition\(^25\). Three of these were also published in international journals\(^23,24,25\). Only one publication came from area of psychology\(^26\) in an international journal.

Most of the authors were from nursing area field. Eight studies were conducted by nurses\(^5,17-21,23,25\), one of them with doctors\(^23\) and another with a dentist\(^25\); two studies were of authors from a medical area\(^22,24\) and one from psychology\(^26\). The articles were classified according to the seven levels of evidence\(^15\); only one was classified as evidence level 4\(^26\) and others\(^5,17-25\) as level 6.

**Summary of selected articles**

Chart 1 presents data from the 11 publications selected for the study.

In the articles, the care measures aimed at promoting the health of the child were found entered in the four areas that make up the SICS, with the most studied included in the general care of health and diet areas. Quantitatively, four\(^18,20,21,26\) articles presented care measures related to the field of promoting development, seven\(^15,17-19,21,23,24\) were regarding general health care, one\(^20\) in the security area, and nine\(^5,17,18,20-25\) were related to diet. (Table 2)

Some habits recommended by the Ministry of Health and observed in Brazilian culture are not detailed in SICS. However, it is understood that such care measures are included in the areas adopted on the scale. In the field general health care, we noticed the use of herbal medicine, a belief in faith healing and the care practice of the umbilical stump. In the security domain we observed topics on child protection against situations of violence not specified in SICS that, in relation to security, address focused care only to the prevention of domestic accidents and health problems.

**DISCUSSION**

After analysis, we observed that the knowledge to care for the child is built upon living with close people who primarily teach technical care\(^21\), such as those that emerged in the general health care field\(^5,17-19,21-24\); hygiene, bathing, care actions with umbilical stump and herbal medicine. General health care provided in the studies indicates the coexistence of using popular features and allopathic therapy, in some families, for the children’s health\(^19\).

Popular features such as healers and homemade herbal teas (pennyroyal, chamomile,
### Chart 1 - Description of articles selected according to author, year of publication, study type, language, population, sample, objectives and results with emphasis on child care. Recife, 2013.

<table>
<thead>
<tr>
<th>Author, year</th>
<th>Study type / language</th>
<th>Population and sample</th>
<th>Objectives</th>
<th>Results/measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vasconcelos MV, Frota MC, Martins MC, Machado MMT (2012) 5.</td>
<td>Qualitative / Portuguese</td>
<td>11 16 to 21 year-old first-time mothers, Croatá-CE.</td>
<td>To describe the experience of mothers about the care for their children, as well as the perception of those in relation to childcare consultation.</td>
<td>Food, hygiene and medication. Herbal Medicine, prayers, midwives, healers and self-medication to treat diseases in children.</td>
</tr>
<tr>
<td>Souza MA, Melo MB, Júnior RSS, Barbosa MA, Siqueira KM, Martins CA, et al (2006) 19.</td>
<td>Qualitative / Portuguese</td>
<td>20 parents/tutors of 0 to 1 year-old children in BHU, Firminópolis-GO.</td>
<td>To identify the key popular features that mothers / parents or guardians use in health care services for their respective children or wards, as well as investigating the credibility deposited in these resources against the offered by the biomedical system.</td>
<td>Popular practices: healers, use of homemade herbal teas. Allopathy, consultation with health professionals, care to umbilical stump.</td>
</tr>
<tr>
<td>Zanatta EA, Motta MGC (2007) 21.</td>
<td>Qualitative / Portuguese</td>
<td>10 mothers of 0-6 months old children, Family Health Unit at countryside area - RS.</td>
<td>To know the care practices and knowledge of mothers to children 0 to 6 months old.</td>
<td>Breastfeeding, complementary feeding, affective care, care actions about hygiene and the umbilical stump.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Methodology</td>
<td>Sample Size</td>
<td>Aim</td>
<td>Intervention</td>
</tr>
<tr>
<td>---------------------------------</td>
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<td>-----------------------------------------------------------------------------------------------</td>
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<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Vieira GO, Silva LR, Vieira TO, Almeida JAG, Cabral VA (2004)</td>
<td>&quot;Quantitative, cross-sectional / English&quot;</td>
<td>2,319 less than 1 year-old children, 2,323 mothers, Feira de Santana-BA.</td>
<td>To describe the eating habits of breastfed and non-breastfed children according to the introduction of liquid and semi-solid / solid foods during the first year of life.</td>
<td>Breastfeeding, food associated or not with breastfeeding, complementary feeding, consumption of semi-solid / solid food by breastfed infants in the first month of life, fruit porridge, vegetable porridge.</td>
</tr>
<tr>
<td>Issler H, Sá MBSR, Senna DM (2001)</td>
<td>&quot;Quantitative, cross-sectional / English&quot;</td>
<td>&quot;65 pregnant women, Prof Samuel Barnsley Health Center, São Paulo-SP.&quot;</td>
<td>To study the knowledge of pregnant women on the overall health of newborns, including aspects of breastfeeding.</td>
<td>General health care to the newborn, breastfeeding.</td>
</tr>
<tr>
<td>Neumann NA, Vitora CG, Halpern R, Guimarães PRV, Cesar JA (1999)</td>
<td>&quot;Quantitative, cross-sectional / Portuguese&quot;</td>
<td>2,208 children under 3 years, accompanied by Pastoral da Criança, Criciúma - SC.</td>
<td>To analyze if children and mothers accompanied by Pastoral da Criança have better health indicators and knowledge about the basic actions of child survival than children and mothers unaccompanied.</td>
<td>Breast feeding, growth monitoring, oral rehydration therapy for diarrhea, diarrhea management, immunizations in the first year of life, immunization and dietary patterns.</td>
</tr>
<tr>
<td>Lindsay AC, Machado MT, Sussner KM, Hardwick CK, Peterson KE (2008)</td>
<td>Qualitative / English</td>
<td>41 mothers of children aged 12 to 36 months, Community Health Agent Program Health / Family Health Program PACS/PSF, Caucaia – CE.</td>
<td>To describe infant feeding practices and beliefs about complementary feeding among Brazilian low-income mothers.</td>
<td>Breastfeeding, food associated or not with breastfeeding, complementary feeding, consumption of semi-solid / solid food.</td>
</tr>
<tr>
<td>Wendland-Carro J, Piccinini A, Millar WS (1999)</td>
<td>Quantitative, case control / English</td>
<td>38 first time mothers and their newborns, Porto Alegre - RS.</td>
<td>To analyze an intervention aimed at influencing the sensitive response from mothers to their babies, with information about the competence of the newborn to interact and promote affectionate handling and interaction with the baby.</td>
<td>Promoting development</td>
</tr>
</tbody>
</table>

Source: authors’ research, 2013
lemon balm, goatweed, nutmeg, fennel, mint, macela, arnica leaf, cinnamon, anise, spearmint, Maytenus ilicifolia), as well as allopathic therapy recommended by health professionals are used alone or together in order to solve or treat health problems(19). Herbal medicine is one of the popular features in the Family Health Strategy used as a health promotion tool, as it strengthens the community link with health teams, popular participation, autonomy of users and comprehensive care in health(27).

The study also found that cultural factors influence processes of children’s care. Appropriate care actions in relation to health promotion, such as bathing, use of 70% alcohol in the umbilical stump and child hygiene care(5,17-18) were identified in the publications. However, practices not recommended that can cause health problems such as the use of tobacco dust, oil and other substances in the umbilical stump(21) were also found.

The adoption of bad hygiene practices can result in health risks to the child. A study in newborns and infants treated in the pediatric outpatient clinic of a university hospital in Recife identified the use of shampoo by 22 mothers (21%) and a conditioner by 6 (5.7%) of them. It was found that 19 children (86.4%) who used shampoo, and all who used the conditioner, presented scalp lesions(4).

Basic knowledge of care practices that promote the health of the child is still insufficient. Thus, guidelines on proper care, such as hygiene of the umbilical stump, reasons for jaundice, vaccines, food, how to treat oral candidiasis, are needed in educational activities on health(23).

The second most cited area in the studies was the child’s diet(5,18,19,20,22,24,25). The scheme re-
commended by the World Health Organization (WHO) is exclusive breastfeeding during the first six months of life. After this period, other food is introduced with breastfeeding, which is kept for two years or more (28). However, we observe a low prevalence of exclusive breastfeeding, with frequent cases of the early introduction of solid foods (22).

Mothers state that maternal employment (25%), hypogalactia (21.2%) and child insatiability (10.6%) are the main reasons for the initiation of solid foods before six months. The introduction of water and tea is justified by the child's thirst (23.4%) and abdominal pain (17.6%) (29).

Insecurity and the lack of knowledge of the caregivers about the need for food intake by a non-breastfed child leads them to supplement the diet with multivitamins prepared to compensate for refusing food, or due to the belief that such products increase the appetite or growth. It is for the health professional to clarify and correct possible feeding errors, avoiding adversities related to a lack or excess of vitamins (3).

First-time mothers have limitations with regard to adequate food for the child (5). One of the main challenges for nurses is to encourage breastfeeding. It is common changes in the type of food, and problems such as feeding errors, that generate malnutrition risk to children in their first year of life (18). It is known that culture, educational and socioeconomic levels, and their social support network, especially the grandparents, have an important influence on infant feeding practices (25). Therefore, we identify the need to encourage health education actions to guide pregnant women and mothers on infant feeding (22).

Three of the selected studies addressed the promoting development area, represented by the affective care between mother and the baby, playing with the child and offering toys (18, 20, 26). In this sense, the child's interaction with family members and their social safety net contributes to their psychosocial development. In their relationship with adults they assimilate skills (such as sitting, walking, talking and controlling sphincters) that are constructed by social history over time. During the first two years, the emotional development characterized is the basic emotional bond. Therefore, development involves a complex process that includes maturation, learning, and psychological and social aspects (3).

The security area was not included in the studies as a way to provide child protection against accidents in the home environment. Although not shown, it is still a relevant field in the promotion of child health as it is in the context of social and family life that there are increased chances of a child's exposure to accidents and violence (30).

In just one study we identified a mother's care measures to protect the child from possible situations of violence due to the place where they lived (20). In Brazil, violence against children and adolescents is a serious social and public health problem. There is a strong association between drug use and the occurrence of aggression against children, however these are complex phenomena involving social, psychological and biological aspects (31).

In relation to domestic accidents, they are usually associated with the sociocultural aspects of family, social network and risk-favoring situations (30). The professional can instruct caregivers about safe ways to explore the environment with a view to the importance of playing with children, and stimulating their curiosity and creativity. We also add that the investigation of the home context of children and family dynamics, allows nurses to plan health education strategies to minimize domestic accident events that result in significant rates of infant mortality (3).

It is a known fact that the care actions to the child should transcend the biological field...
and be engaged in the biopsychosocial triad. From this perspective, it is essential that nursing consultation in child care associates scientific and popular knowledge in the evaluation of care, contributing to improving the process of being a mother during the growth and development of children\(^5\). Therefore, for the health professional to conduct a dialogue based on the reality of each family it is essential to understand the experiences of mothers on the care of their children\(^19\).

Finally, the child care nursing consultation allows the monitoring of children and their families in order to improve their knowledge about food and general care practices. Through health education, the nursing teams can guide and support the family in child care actions\(^6\). This orientation is a key element for the promotion of health that leads to the development of a critical and reflective consciousness and the emancipation of the subjects, as people aware of their health needs take better care of themselves and their families\(^8\).

**CONCLUSION**

In the selected studies, the domestic care practices focus, above all, in meeting the general needs of health and diet of the child, and especially in technical care actions such as hygiene and nutrition. Stimulating the development and promotion of safety were aspects addressed to a lesser extent in the publications.

The adoption of popular, and sometimes inadequate, practices in childcare signals the need to strengthen health education practices in order to minimize possible injuries.

It appears that scientific publications about the care measures aimed at the promotion of child health in Brazil performed at home are still incipient, as evidenced in the studies included in this integrative review. Therefore, there is a need for further research in this area, exploring the care actions to children in all its dimensions to redirect the guidelines in childcare consultation according to each family's needs, as well as enhancing the effectiveness of health education activities.

**REFERENCES**


Authors’ Participation: Talita Helena Monteiro de Moura and Luciana Pedrosa Leal participated in the design, data collection, analysis and interpretation, writing and critical review of the manuscript. Maria Gorete Lucena de Vasconcelos, Cleide Maria Pontes, Tatiane Gomes Guedes and Lorena Barbosa Ximenes contributed to the writing, critical review of the manuscript and final approval of the version to be published.

All the authors participated in the phases of this publication in one or more of the following steps, in accordance with the recommendations of the International Committee of Medical Journal Editors (ICMJE, 2013): (a) substantial participation in the design or manufacture of the manuscript or the collection, analysis or interpretation of data; (b) elaboration of the document or performance of critical review of the intellectual content; (c) approval of the submitted version. All authors declare for appropriate action that are of their responsibilities the content related to all aspects of the manuscript submitted to OBJN. They ensure that issues related to the accuracy or completeness of any part of the article have been properly investigated and resolved, exempting therefore the OBJN of any joint participation in any imbroglios on the matter at hand. All the authors declare that they have no conflict of interest, whether financial or personal, to influence the drafting and / or interpretation of the findings. This statement has been digitally signed by all authors as recommended by the ICMJE, whose model is available in http://www.objnursing.uff.br/normas/DUDE_final_13-06-2013.pdf

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