Evaluation of Primary Healthcare from the perspective of child caregivers: an integrative review

Avaliação da atenção primária à saúde sob a ótica de cuidadores de crianças: revisão integrativa

Evaluación de la atención primaria de salud bajo la óptica de los cuidadores de niños: revisión integrativa

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ABSTRACT

Objective: To identify the quality evaluation of Primary Healthcare services in the literature from the perspective of child caregivers through applying the PCATool, children’s version. Method: An integrative review performed in the MEDLINE, CINAHL, LILACS, BDENF and Web of Science databases. Results: Seventeen (17) articles were selected. All included studies were descriptive (100%) and had evidence level IV (100%). The affiliation degree component (average = 7.72) of the longitudinality attribute, the utilization component (average = 7.14) of the first contact access attribute, and the information system component (average = 6.63) of the coordination attribute presented high average scores (≥6.6), while the other attributes and components obtained low average scores (<6.6). Conclusion: Although management of Primary Healthcare services has consistently applied efforts to improve their performance and quality in providing and delivering care to the population, it has been observed that problems related to the process and structure of these services still persist given that most of the attributes were poorly evaluated.

DESCRIPTORS

Primary Health Care; Child; Caregivers; Health Evaluation; Child Health; Review.
INTRODUCTION

Primary Healthcare (PHC) is the first level of care provided to populations and is a fundamental part of the health systems of high and low income countries\(^{[1-2]}\), since it provides services without access restriction and it has an ability to address most of the population's health needs, offering disease and injury prevention, as well as health promotion and care actions\(^{[3-6]}\).

It is considered important to improve the quality of PHC in order to build stronger health systems\(^{[4]}\). International studies indicate that PHC contributes to better health\(^{[1-2,4-6]}\), equity\(^{[4-6]}\) and cost reduction outcomes\(^{[3,4-6]}\). Therefore, it is essential to evaluate PHC services through the presence and extension of their attributes in order to reorganize the actions for more qualified healthcare\(^{[7]}\).

The Primary Care Assessment Tool (PCATool) is the most used instrument to evaluate PHC in Brazil, considering that this tool is the closest to the Family Health Strategy (FHS), proposed by the National Primary Healthcare Policy\(^{[9]}\). The PCATool was developed and validated by Barbara Starfield and colleagues\(^{[9-10]}\), and identifies whether health services and PHC are oriented according to their essential and derived attributes\(^{[6-7]}\). The essential attributes are: first contact access, longitudinality, comprehensiveness and coordination of care\(^{[11-12]}\), which are named after their need to provide primary care\(^{[13]}\). In turn, the derived attributes are: family orientation, community orientation and cultural competence\(^{[13-15]}\), which qualify PHC and expand the interaction of individuals/community with health services\(^{[13]}\). It is noteworthy that the derived cultural competence attribute was excluded in the Brazilian version, since a dimension with three or more representative questions was not consolidated in the factorial analysis\(^{[13]}\).

An evaluation of PHC quality from the perspective of child caregivers through the PCATool (children’s version) has been the subject of several national studies\(^{[14-17]}\), however there is no integrative literature review on the subject yet. Therefore, this study was proposed, aiming to emphasize the Brazilian reality. Its results will make it possible to identify how much the PCATool (children’s version) has been used and which essential and derived attributes achieved good and poor performance according to child caregivers. Recognition of essential attributes or derivatives that did not achieve good performance from the perspective of child caregivers may contribute to proposing interventions that can modify this situation, being an important ally in child health to improve quality of life, reduce child mortality, preventable diseases and preventable hospitalizations.

Given the above, the aim of this study was to identify the evaluation of the quality of PHC services in the literature from the perspective of child caregivers through applying the PCATool, children’s version.

METHOD

STUDY DESIGN

This is an integrative review (IR), with the following steps being adopted to conduct it: identifying the theme and formulating the research question; setting inclusion and exclusion criteria; categorizing studies; evaluating the sample studies; interpreting the results; and then synthesizing the main findings found in the studies\(^{[18]}\).

The research question was formulated according to the PICo strategy, namely: Participants – P; Interest – I; Study context – Co\(^{[19]}\), and the following structure was considered: P – children; I – evaluation of health services; Co – Primary healthcare. Thus, the following question was elaborated: “What is the evaluation of the quality of PHC services from the perspective of child caregivers, as verified through application of the PCATool, children’s version?”

DATA COLLECTION

The search was performed in April 2018, in the databases: Medical Literature Analysis and Retrieval System Online via National Library of Medicine National Institutes of Health (MEDLINE via PubMed); Web Of Science (WOS); Cumulative Index to Nursing and Allied Health Literature (CINAHL); Latin American and Caribbean Health Sciences Literature (LILACS) via the Virtual Health Library (VHL) and the Base de Dados de Enfermagem (BDENF) via the VHL. The controlled and uncontrolled descriptors were selected from the Health Sciences Descriptors (DeCs), Medical Subject Headings (MeSH) and CINAHL Terminology (Emtree) (Chart 1).

![Chart 1 – Controlled and uncontrolled descriptors and search expressions used in databases according to the PICo strategy – Teresina, PI, Brazil, 2018.](image)
Primary studies which evaluated PHC services from the perspective of child caregivers through applying the PCATool – children’s version, without time/period determination, in Portuguese, English and Spanish, and which were available in full in the database were included. Exclusion criteria comprised: literature reviews, secondary studies, letters, editorials, experience reports, case studies, PCATool validation studies, primary studies whose participants were adults, conglomerates, health professionals and/or other subjects who were non-caregivers/family members of children.

First, 1,525 publications were located, being 438 in MEDLINE, 329 in LILACS, 48 in BDENF, 41 in CINAHL and 669 in WOS. Identification and selection were independently performed by two reviewers, taking into consideration the research question and the established inclusion criteria. All titles and abstracts were initially read, and 1,486 were discarded. It is noteworthy that 12 articles were repeated among the databases, which were only counted once. A complete reading of the remaining 27 studies was subsequently performed; 10 articles were excluded after the complete reading because they did not meet the inclusion criteria. Thus, the sample consisted of 17 articles (Figure 1).
An instrument prepared by the authors was used to extract information from the studies included in the review, containing information about: the authorship; publication year; database; purpose, design and study participants; level of evidence; and evaluated PHC attribute/component and its average score. The level of evidence adopted by this IR was stratified into: Level I – meta-analysis of multiple controlled studies; Level II – individual experimental studies (randomized controlled trial); Level III – quasi-experimental studies (non-randomized clinical trial, pre and post-test single group, time series or case control); Level IV – non-experimental studies (descriptive, correlational and comparative research, qualitative research and case studies); Level V – program evaluation data and data obtained systematically; Level VI – expert opinions, experience reports, consensus, regulations and laws(20).

**DATA ANALYSIS AND PROCESSING**

The critical analysis and qualitative synthesis of the selected studies were performed descriptively. Two categories were created in order to discuss the findings which have the purpose of demonstrating strengths and aspects that need improvement to achieve more qualified and resolute primary healthcare, presenting the attributes that reached high and low mean scores. It is noteworthy that a high PHC score is considered to be those that obtain a value greater than or equal to 6.6(12).

**RESULTS**

**CHARACTERIZATION OF THE REVIEW STUDIES**

All studies in this review (17 – 100%) were descriptive, 14 (82.4%) were available in the LILACS database, and the number of participants ranged from 34 to 3,145 child caregivers (Chart 2).

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**Chart 2 – Characterization of productions included in the integrative literature review – Teresina, PI, Brazil, 2018.**

<table>
<thead>
<tr>
<th>Article code. Lead author, year. (Database)</th>
<th>Design (Level of evidence)</th>
<th>Study objective</th>
<th>Study participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>A01. Leão CDA(17), 2011. (LILACS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To evaluate the attributes of primary healthcare offered by FHS teams compared to other child health services in Montes Claros (MG).</td>
<td>272 child caregivers.</td>
</tr>
<tr>
<td>A02. Furtado MCC(21), 2013. (LILACS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To analyze the presence and extent of Primary Care attributes and the degree of affiliation of children under 1 year of age in the Family Health Unit.</td>
<td>44 mothers of children under 1 year.</td>
</tr>
<tr>
<td>A03. Araújo JP(24), 2014. (LILACS/CINAHL/WOS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To identify the extent of family orientation and community orientation attributes in child healthcare in primary care services.</td>
<td>548 family members and/or caregivers of children under 12 years old.</td>
</tr>
<tr>
<td>A04. Mesquita Filho M(27), 2014. (LILACS/WOS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To evaluate the attributes of primary healthcare for children and to know associated factors.</td>
<td>419 caregivers of children from 0 to 24 months old.</td>
</tr>
<tr>
<td>A05. Oliveira VB(23), 2015. (LILACS/WOS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To compare the care model of Traditional Basic Units (BHU) with the FHS units.</td>
<td>482 family members responsible for children.</td>
</tr>
<tr>
<td>A06. Silva AS(23), 2015. (LILACS/WOS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To evaluate the attributes of primary healthcare regarding access; longitudinality; comprehensiveness; coordination; family orientation and community orientation in the FHS, triangulating and comparing the point of view of social actors involved in the care process.</td>
<td>527 adult users, 34 health professionals and 330 responsible for children up to 2 years old, related to 33 family health teams in 11 municipalities.</td>
</tr>
<tr>
<td>A07. Fracolli LA(29), 2015. (WOS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To evaluate the presence and extension of attributes of Primary Healthcare in the FHS in the city of Quatá-SP.</td>
<td>34 caregivers of children under 2 years.</td>
</tr>
<tr>
<td>A08. Oliveira VC(30), 2015. (LILACS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To evaluate and compare the presence and extension of the longitudinality attribute in the BHU and FHS services in the municipality of Colombo, state of Paraná.</td>
<td>482 relatives of children from 0 up to 1 year-old.</td>
</tr>
<tr>
<td>A09. Daschevi J(30), 2015. (LILACS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To evaluate the principles of family and community orientation of primary healthcare for children in basic health units of Londrina, Paraná.</td>
<td>609 parents or primary caregivers of children under 12 years old.</td>
</tr>
<tr>
<td>A10. Souza GT(30), 2015. (LILACS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>To evaluate the coordination principles of primary healthcare for children in 39 Basic Health Units in the urban area of Londrina, Paraná.</td>
<td>609 parents or primary caregivers children under 12 years old.</td>
</tr>
<tr>
<td>A11. Silva AS(30), 2016. (MEDLINE/WOS)</td>
<td>Descriptive and quantitative (IV)</td>
<td>Evaluate care for children under 2 years of age provided in the FHS.</td>
<td>586 responsible adults/caregivers of children from 0 to 2 years old, however only 330 were considered who unanimously pointed to the FHS as a regular source for child health care.</td>
</tr>
</tbody>
</table>

continue...
The degree of affiliation component (mean = 7.72) of the longitudinality attribute; the utilization component (mean = 7.14) of the first contact access attribute; and the information systems component (average = 6.63) of the coordination attribute presented high average scores (≥6.6), while the other attributes and components obtained low average scores (<6.6) (Chart 3).

**Chart 3** - Mean evaluation scores for primary healthcare attributes and mean PCATool (children's version) scores of studies included in the review – Teresina, PI, Brazil, 2018.
...continuation

### DISCUSSION

#### Attributes which performed well

This category included: utilization component, first contact access attribute; degree of affiliation component of the longitudinality attribute; longitudinality attribute; and care integration components and information systems of the coordination attribute.

Of the four studies (23,28,32-33) which assessed the degree of affiliation, three (23,28,32) (75%) had a high score, showing that the primary care service is recognized as a reference for health care by users of the health system, considering that the degree of affiliation is configured as recognition of that health service/professional as the main source to promote the user’s healthcare (33). It is noteworthy that some problems related to the lack of resoluteness of the service and the difficulty of accessibility may influence the degree of affiliation (33).

The first contact access attribute is divided into two components: accessibility and utilization (23), where the first concerns the availability of the service to the user and the ability to meet the demands (routine, spontaneous demand, of acute illness or acute chronic problems), while the second relates to how much the user prioritizes the use of a particular health service (23). It is noteworthy that although the attribute is composed of two components, only the utilization component achieved a good evaluation in 62.5% of the primary articles that evaluated it. Thus, it is understood that PHC is the main alternative when the child needs healthcare.

The longitudinality attribute was well evaluated in 60% of the articles (14,17,21,23,27,32) that measured it. This attribute is considered as being central to PHC (27), as it represents the continuity of care over time and permanently (23). It is important to highlight that the presence of longitudinality in child care provides benefits such as: prescription of more agile prevention actions, reduction of unnecessary referrals, better understanding of the individual’s health/disease process and more accurate diagnoses and treatments, impacting on a reduction in health system costs (22,27). Some factors may negatively influence this attribute, such as: health systems with high turnover among professionals and lack of training of professionals (24).

The coordination attribute refers to the guarantee of care continuity from the perspective of an articulated network of health services (21,23,31) as well as the opportunity to identify problems that need permanent monitoring (21). Its components, care integration and information systems received satisfactory evaluation in 62.5% and 75% of the articles, respectively.

Care integration refers to the availability of access to specialized services by users, however, items that question counter-reference are still poorly evaluated by users (17). In other words, communication between basic and specialized services still does not occur in an effective way (26), indicating the need to integrate care networks in order to optimize access and use of health resources by the population.

Regarding the information system component, it is noteworthy that its positive evaluation evidences responsible monitoring of users by professionals for recording important information about the child’s health. The use of these records enables monitoring the health status of the population, which allows improvement and evaluation of health-related indicators. However, a study highlights that these information records and users’ access to them are either not occurring or occurring ineffectively (22).

#### Attributes which did not attain good performance

Attributes and components which did not achieve good performance were inserted in this category, demonstrating the need for improvement in their presence and extension in order to achieve more qualified and resistant PHC for children, which are: first contact access attribute and its accessibility component; coordination attribute; comprehensiveness attribute and its available service components (subdivided into basic services available and complementary services available) and services provided; and family orientation and community orientation attributes.

Regarding the accessibility component of the first contact access attribute, 88.9% of the articles had a low score, which demonstrates weakening in the initial
healthcare process, meaning when the user tries to access health services(27). In order to justify this problem, factors are highlighted, such as: difficulties in scheduling appointments for the same day(23,27) or when necessary(27), getting quick professional telephone assistance(21,27) and long waiting at reception to get an appointment or receive care(23). It is emphasized that the attribute first contact access is complex, considering that it is related to the individual/community and organizational characteristics of health services. Adopting innovative management policies is evidenced to ensure greater accessibility to users and to provide health services which meet their main needs(28).

The coordination attribute was evaluated by two(14,21) articles, receiving low scores in both. Thus, there is evidence of the still fragmented children's healthcare in basic services, mainly due to factors which interfere with coordination such as the high turnover of physicians in primary care services and inadequate training in the public health area(21). It is noteworthy that the negative evaluation of this attribute implies fragility in the care continuity, and consequently care fragmentation, which should be comprehensive and integrated. Thus, it is understood that coordination is an attribute of great relevance to others(28), and that comprehensiveness becomes unviable without it(30).

The attribute of comprehensiveness and its components were poorly evaluated in most studies, which indicates a barrier to implementing comprehensive care(30). From this perspective, the health needs of children and their families should be recognized, and PHC services should have the resources to meet them(15).

Some factors were cited by the studies to explain low scores, such as the unavailability of services that address the drug phenomenon, mental health, visual assessment, and HIV counseling and detection(15,27,30). In addition, a compromise in comprehensiveness may result from overvaluation and searching for services with higher technological densities in the Brazilian health system. In this sense, it is considered essential that professionals and managers identify the health needs of the population and coordinate care in order to provide equitable actions and services(32).

The family orientation and community orientation attributes presented unsatisfactory assessments in 92.3% of the studies, which indicates the need to promote health actions that envisage both the individual and their family(28,31), and cover the community in health actions in order to make changes in the environment in which they live(28).

The derived attribute of family orientation considers the family as a care subject, recognizing and meeting their needs(17,29). It is recognized that knowing the context in which the individual/family live provides the professional new care possibilities and more resolute care committed to meeting health needs(31-32). Thus, comprehensiveness can be compromised if family orientation is ineffective(32).

For community orientation, the results show a lack of participation and social control by the population studied in the articles(17), which portrays the importance of knowing the health needs of the community through knowing the context in which families are inserted, and that health actions should take into account the epidemiological profile of the community(30). A weakness of this attribute may compromise planning and evaluation(32), as the developed actions may not be recognized as a priority need by the community.

CONCLUSION

Although the management of PHC services has been making efforts to improve its performance and quality in providing and delivering care to the population, problems related to the process and structure of these services still persist, considering that most of the attributes were evaluated unsatisfactorily. Items scored in the “accessibility” component, for example, are barriers to childcare because they are only available during business hours and during the week. In addition, the weakness in the referral and counter-referral process makes it difficult the dialogue between the different levels of care.

It is noteworthy that the items of the services provided component address guidance regarding childcare, especially safety, yet this component was poorly evaluated, showing an absence of and/or insufficient guidance needed for preventing accidents and basic care actions. However, the instrument does not have questions about childcare consultation, in which the growth and development of children under 2 years are verified and monitored, which enables identifying problems in a timely manner.

The family and community context in which the child lives need to be included and valued by health professionals, so that care is tailored to their needs which are diverse and different for each child. From this perspective, the importance of professionals developing communicative and investigative skills with their clientele is highlighted, as these attributes were poorly evaluated.

Despite the persistence of the mentioned barriers, the caregivers and/or guardians of the researched children reported a strong degree of affiliation with PHC services, indicating that they are the main reference for health care, as they seek the basic units when they need (utilization) and have a strong bond with professionals, as children are followed over time (longitudinal).

Therefore, the studies showed the importance of PHC for childcare and the need to develop strategies which promote improving the quality of offered services and an extension of the service hours, as well as executing activities such as care guidelines.
RESUMO

Objetivo: Identificar na literatura a avaliação da qualidade dos serviços de Atención Primaria à Saúde sob a ótica de cuidadores de crianças por meio da aplicação do PCATool, versão infantil. Método: Revisión integrativa realizada nas bases de dados MEDLINE, CINAHL, LILACS, BDBNF e Web of Science. Resultados: Foram selecionados 17 artigos. Todos os estudos incluídos eram descriptivos (100%) e possuíam nível de evidência IV (100%). O componente grau de afiliação (média=7,72), do atributo longitudinalidade, o componente utilização (média=7,72), do atributo acesso de primeiro contato, e o componente sistema de informação (média=6,63), do atributo coordenação, apresentaram média dos escores alta (≥6,6), enquanto os demais atributos e componentes obtiveram média dos escores baixa (<6,6). Conclusão: Embora a gestão dos serviços de Atención Primaria à Saúde tenha aplicado constantemente esforços para melhorar seu desempenho e qualidade na oferta e prestação da assistência à população, observou-se que problemas relativos ao processo e estrutura destes serviços ainda persistem, tendo em vista que a maioria dos atributos foi avaliada insatisfatoriamente.

DESCRITORES
Atención Primaria de Salud; Niño; Cuidadores; Evaluación en Salud; Salud del Niño; Revisión.

REFERENCES


