PRIMARY HEALTH CARE ESSENTIAL AND DERIVATIVE ATTRIBUTES IN CHILDREN AND ADOLESCENTS WITH LEPROSY

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ABSTRACT

Objective: to assess the presence and extension of Primary Health Care essential and derivative attributes in the assistance provided to children and adolescents with leprosy.

Method: a cross-sectional study of an evaluative nature, with a quantitative approach. The information was obtained through interviews with nurses and physicians (n=37) working at Primary Health Care units in the care of children and adolescents with leprosy in the municipality of Parauapebas, Pará, Brazil, between October 2021 and February 2022. Mean, minimum, maximum and standard deviation values were used in the descriptive analyses, as well as the Levene test, Student's t-test. Pearson's Correlation Coefficient and a 5% confidence level.

Results: 45.9% of the study participants had attended up to two training programs in leprosy care and 32.4% were trained in minors with the disease. When analyzing the mean values of each attribute, low orientation of the service provided and lower values of the general mean were observed in the analysis of attributes related to Access and Continued Care (score 3.4, SD±1.3; and score 3.8, SD±1.7 respectively). There was a regular positive correlation in most of the evaluated attributes and a significant strong positive correlation between care coordination and Professional/Community Orientation: r=0.601 and r=0.651, respectively.

Conclusion: there is evidence of weaknesses in health care for children and adolescents with leprosy related to low service orientation; however, qualification in Care coordination exerts a positive influence on Professional orientation and Community orientation with an impact on service surveillance.

DESCRIPTORS: Primary Health Care. Children's health. Adolescent's health. Leprosy. Evaluation of health services.

ATRIBUTOS ESSENCIAIS E DERIVADOS DA ATENÇÃO PRIMÁRIA À SAÚDE EM CRIANÇAS E ADOLESCENTES COM HANSENÍASE

RESUMO

Objetivo: avaliar a presença e extensão dos atributos essenciais e derivados da Atenção Primária à Saúde no atendimento à criança e ao adolescente com hanseníase.
Método: estudo transversal, de natureza avaliativa, com abordagem quantitativa. As informações foram obtidas por meio de entrevistas com enfermeiros e médicos (n=37) atuantes em unidades da atenção primária à saúde no atendimento à criança e ao adolescente com hanseníase no município de Parauapebas, Pará, Brasil, entre os meses de outubro de 2021 a fevereiro de 2022. Utilizou-se nas análises descritivas os valores de média, mínimo, máximo e desvio padrão, e os testes de Levene, Teste *t- Student* e Coeficiente de Correlação de Pearson e nível de confiança de 5%.
Resultados: dos participantes do estudo,45,9% possuíam até dois treinamentos em cuidados com hanseníase e 32,4% com capacitação em menores com o agravo. Ao analisar as médias dos valores de cada atributo, observou-se baixa orientação do serviço prestado e valores inferiores da média geral na análise dos atributos relativos ao Acesso e Atendimento continuado (*score* 3,4; DP±1,3 e 3,8 DP±1,7 respectivamente). Observou-se correlação positiva regular na maioria dos atributos avaliados e correlação positiva forte significativa entre coordenação do cuidado com Orientação Profissional/Comunitária, respectivamente (r= 0,601) e (r= 0,651).
Conclusão: há evidências de fragilidades nos cuidados de saúde em crianças e adolescentes com hanseníase relacionados à baixa orientação do serviço, contudo, a qualificação na Coordenação do Cuidado influencia positivamente na Orientação Profissional e na Orientação Comunitária com impacto na vigilância dos serviços.

DESCRITORES: Atenção Primária à Saúde. Saúde da Criança. Saúde do Adolescente. Hanseníase. Avaliação de Serviços de Saúde.

ATRIBUTOS ESENCIALES Y DERIVADOS DE LA ATENCIÓN PRIMARIA DE LA SALUD EN NIÑOS Y ADOLESCENTES CON LEPRA

RESUMEN

Objetivo: evaluar la presencia y la extensión de los atributos esenciales y derivados de la Atención Primaria de la Salud en la asistencia de niños y adolescentes con lepra.
Método: estudio transversal, de naturaleza evaluativa y enfoque cuantitativo. Toda la información se obtuvo por medio de entrevistas realizadas entre octubre de 2021 y febrero de 2022 con enfermeros y médicos (n=37) que trabajan en unidades de Atención Primaria de la Salud en la asistencia de niños y adolescentes con lepra del municipio de Parauapebas, Pará, Brasil. En los análisis descriptivos se utilizaron los valores de media, mínimo, máximo y desvío estándar, además de las pruebas de Levene y *t* de *Student*, el Coeficiente de Correlación de Pearson y nivel de confianza del 5%.
Resultados: el 45,9% de los participantes del estudio había asistido a un máximo de dos programas de capacitación en la atención de enfermos de lepra y el 32,4% se había capacitado en menores de edad que sufren el problema. Al analizar las medias de los valores de cada atributo, se observó escasa orientación del servicio prestado y valores inferiores a la media general en el análisis de los atributos relacionados con Acceso y Asistencia continuada (puntuación de 3,4; DE±1,3; y 3,8 DE±1,7 respectivamente). Se observó una correlación positiva regular en la mayoría de los atributos evaluados y una fuerte correlación y significativa entre Coordinación de la asistencia y Orientación profesional/comunitaria: r=0,601 y r=0,651, respectivamente.
Conclusión: se detecta evidencia de debilidades en la atención de la salud en niños y adolescentes con lepra relacionadas a la escasa orientación del servicio; sin embargo, la calificación en la Coordinación de la asistencia ejerce una influencia positiva positivamente sobre la Orientación profesional y la Orientación comunitaria, con un efecto en la vigilancia de los servicios.

DESCRIPTORES: Atención Primaria de la Salud. Salud infantil. Salud del adolescente. Lepra. Evaluación de servicios de salud.

INTRODUCTION

Primary Health Care (PHC) in Brazil is based on the guiding principles of the Unified Health System (*Sistema* Único *de Saúde*, SUS) and has the mission of offering actions and services within the concept of territoriality[1]. It is guided by structuring axes recognized in the national[2] and international[3] literature, with the essential attributes being first-contact access, longitudinality, comprehensiveness and care coordination and the derivatives ones: family and community orientation and cultural competence[4].

According to the *Primary Care Assessment Tool* (*PCATool*), the following are understood as essential attributes: Access/Attention, related to the first contact that the user has with the health service, with each new or recurrent problem, it is considered the gateway to the health service; Longitudinality refers to the care offered regularly, that is, it requires attention over time; Comprehensiveness, which makes up the dimensions structured in actions to promote, prevent and protect the health of an individual/family and care at the medical assistance complexity levels; Coordination can be considered as the articulation between the various health services and actions in an egalitarian way[5].

According to *PCATool*, regarding the derivative attributes, they presuppose a qualification of the care provided based on aspects related to family and community orientation and cultural competence in the health care process[5–6].

The quality of health and, mainly, of PHC services is currently being strengthened because it represents a preponderant political and social function with a consequence in the process of transformation and appreciation of aspects and attributes capable of measuring the provision of services offered to the population[7]. In this context, for health assessments, the *PCATool*[5] instrument stands out, which measures the presence and extent of PHC attributes and has versions aimed at child patients; adult patients; medical professionals and nurses; oral health for patients; oral health for dental professionals and leprosy.

The leprosy PCAT evaluates aspects such as the various ways in which users have contact with the health service, the barriers that prevent or hinder access, care continuity, the way in which the disease affects the user's life, the range of services offered in addition to leprosy treatment, operation of the referral and counter-referral system, the service's links with the user's family and the community, and how the process of training the health professional who attends to the assessed problem takes place[8].

The organization of attributes according to the leprosy PCAT was formulated with the following essential attributes: gateway; access; continued service; integrality of the services available and provided; and care coordination. The derivative attributes were constituted as follows: family orientation; community orientation; and professional orientation[8].

Leprosy is considered a neglected and endemic disease in Brazil and in various countries around the world[9]. Studies that used *PCATool*-leprosy showed psychometric validity parameters and evidenced practice through professional approaches that qualify leprosy care in PHC by measuring the presence and extent of the essential and derivative attributes[8,10].

Leprosy in children and adolescents aged below 15 represents an active community transmission factor for the disease and should be monitored continuously. In 2020, in this population,8,629 new cases of the disease were detected worldwide, corresponding to 6.8% of a total of 127,396, with a detection rate of 16.4 per million inhabitants[9]. However, with the advent of the COVID-19 pandemic, there was a 37.1% reduction in the number of cases when compared to 2019, which may represent possible underreporting of the cases recorded globally[9].

Given this magnitude, the evaluation of the assistance provided to these individuals, especially in children, can direct the implementation of better strategies for coping with the problem, directly impacting their quality of life and their social relationships[9,11].

The 2021–2030 Global Leprosy Strategy "Towards zero leprosy" has as one of its references the surveillance of cases in children under 15 years of age, foreseeing that joint efforts be adopted by municipal, state and national governments, seeking to improve guarantee of access to essential services, as well as the guarantee of therapeutic counseling, stigma reduction, social support and psychological care[12].

In this context, the presence of gaps related to the evaluation of services provided for the effective care of children and adolescents with leprosy is identified, as the studies are mostly developed with adults: therefore, this study aims at evaluating the presence and extension of the PHC essential and derivative attributes in the care of children and adolescents with leprosy.

METHOD

This is a cross-sectional study of an evaluative nature, with a quantitative and descriptive approach.

It was conducted in the Family Health Teams (PHC) from the municipality of Parauapebas-Pará, Brazil. The municipality is known for being in the main mineral province of the planet: Serra dos Carajás. It has an estimated population of 218,000 inhabitants and its PHC consists of 37 Family Health teams and 16 Primary Care Teams[13].

The study population consisted of thirty-seven health professionals, nurses and physicians, of both genders and working for at least 1 year in the PHC units from the urban area of the municipality of Parauapebas-Pará, Brazil. The physicians and nurses that were working in managerial positions at the Basic Health Units were excluded from the study.

Sampling of the participants in the evaluation process of the PHC essential and derivative attributes was for convenience based on the composition of a total of 37 nurses and physicians (22 nurses and 15 physicians) specialized in the care of children and adolescents with leprosy in PHC.

Data collection took place in the period between October 2021 and February 2022 through interviews applied to the study participants, aiming at the health protocol in force due to the COVID-19 pandemic. The interviews took place at the health unit where the professionals performed their work activities, in a reserved room and by appointment, and lasted a mean of 30 to 45 minutes.

The variables analyzed in the study consisted of items listed in the components related to the essential attributes (domains): gateway, access, longitudinality, comprehensive care and care coordination; and those related to the derivative attributes: family orientation, community orientation and professional orientation, as well as essential, derivative and general scores.

Due to the absence in the literature of a specific instrument for evaluating the care provided to children and adolescents with leprosy for data collection, a standardized questionnaire was created based on the Instruments for Assessing the Performance of Primary Care in Leprosy Control Actions – PCAT-leprosy[8] and in PCATool-Brazil[5].

Regarding the domains assessed, the following were identified: 1) Essential attributes: Gateway; Access; Continuing care; Integrality of the services; Care coordination; and 2) Derivative attributes: Family orientation; Community orientation; Professional orientation. To ease understanding, analysis and presentation of the data, the "Integrality of the services available and provided" attribute was divided into two: Integrality of the services available and Integrality of the services provided[5,8].

A 5-point Likert scale was used (1 – Definitely not; 2 – Probably not; 3 – Probably yes; 4 – Definitely yes; 9 – I don't know/I don't remember); and a dichotomous scale (1 – Yes; 2 – No) as answer options.

The *SPSS Statistic* software, version 20, was used for data analysis. To calculate the score of the evaluative instrument, the stages described and recommended in the manual of the PCATool

Instrument – Brazil[5] and in the validation study of PCAT-leprosy[8] were followed, producing scores for each PHC attribute and a general score on the quality of care for leprosy in PHC[5,8].

As a first step, the frequency of missings (answer 9) was identified. In the items that had less than 50% of missing data, the value of "9" (I don't know/I don't remember) was transformed into a value of "2" (Probably not). This transformation is necessary to negatively score some characteristics of the health service that are not known by the interviewee[5]. Items that had more than 50% of "9" answers (missings) were excluded from the analysis of the score corresponding to the attribute to which they belong if more than 50% of the items that comprise that attribute had valid answers. The score for this attribute was blank ("missing") and not considered for calculating the mean value attributed to the respective attribute[5].

Subsequently, in the answers given to the items whose response scale was dichotomous (1 – Yes; 2 – Mo), there was the following conversion: items that received '1' answers were changed to '4' (Definitely yes); and the '2' answers were changed to '1' (Definitely not).

The scores for each PHC attribute were calculated by averaging the response values of the items that make up each attribute or its component, representing its measurement and extension in the care of children and adolescents affected by leprosy, within the PHC context[5,8].

The score corresponding to the "Gateway" attribute (5 items), for example, was calculated as follows: C1 + C2 + C3 + C4 + C5 / 5.

Afterwards, it was necessary to transform the scores of each attribute or component into a scale from 0 to 10, using the following formula: [Score obtained – 1 (Minimum value)] x 10 / [4 (Maximum value) – 1 (Minimum value)].

The PHC essential score was measured by adding up the mean score of the components that belong to the essential attributes – gateway, access, continued care, integrality of the services available and provided and coordination, divided by the number of components:

The *PHC derivative score* was measured by adding up the mean score of the components that belong to the derivative attributes – family orientation, community orientation and professional orientation – divided by the number of components:

The *general score* was measured by adding up the mean score of the components that belong to the essential attributes, added to the derivative attributes, divided by the total number of components. The general score represents the overall performance of PHC in caring for children and adolescents affected by leprosy.

To evaluate the results of the scores, we chose to use the same standardization of PCATool-Brazil[5] and PCAT-leprosy[8], which determines:

a) Scores equal to or greater than 6.6*:* they indicate high service orientation towards PHC. In this research, it was considered that the service is oriented to carry out leprosy control actions in children and adolescents in the PHC context.

b) Scores below 6.6: they indicate that the service is little oriented towards PHC. In this case, it was considered that the service has weaknesses in carrying out leprosy control actions in children and adolescents in the PHC context.

Mean, minimum, maximum and standard deviation values were used in the descriptive analyses, as well as the Levene test to assess equality between variances, Student's t-test that evaluated the existence of differences between means, and Pearson's Correlation Coefficient to verify the correlation between essential and derivative attributes and between these and the general score. For the qualitative assessment of the correlation degree between two variables, the following correlations were chosen: Weak = $(0<r<0.3)$; Fair = $(0.3≤r<0.6)$; Strong = $(0.6≤r<0.9)$; and Very strong = $(0.9≤r<1)$. 95% Confidence Intervals (95% CIs) were considered for the statistical analyses.

The research was approved by the Research Ethics Committee of *Universidade de Cuiabá* and all participants signed the Free and Informed Consent Form (FICF), with all the information pertinent to the study, as well as the rights guaranteed to the research participants.

RESULTS

The study participants were 22 nurses and 15 physicians. Among them, their time working in PHC varied between one and 23 years, with 59.4% of the professionals having worked in PHC for up to three years. Referring to the number of training programs on leprosy, 45.9% of the interviewees had attended up to two. Of them, 32.4% were trained on leprosy in children and adolescents below the age of 15. 89% of the study participants had already treated leprosy cases.

When the attributes related to each domain of the essential and derivative attributes and the set of essential, derivative and general score values were analyzed in the study (Table 1), mean values related to the general score of 5.2 (SD±2.3) were observed referring to all attributes analyzed. Lower values of the overall mean are also seen in the analysis of the attributes related to Access and Continued Care (score 3.4, SD±1.3; and 3.8 SD±1.7, respectively).

Table 1 – Presence and extension of the Primary Health Care attributes in the assistance provided to children and adolescents with leprosy, according to nurses' and physicians' assessments. Parauapebas – Pará, Brazil, 2021 and 2022. (n=37)

Attributes	Minimum/Maximum	High Score %*	Mean (SD†)
Gateway	1.1 l-----l 10	21.6	5.9 (±2.3)
Access	1.3 l-----l 6.7	2.7	3.4 (±1.3)
Continued care	1.3 l-----l 10	5.4	3.8 (±1.7)
Integrality – Services available	2.4 l-----l 10	27.2	6.5 (±2.1)
Integrality – Services provided	1.5 l-----l 10	13.5	5.3 (±2.3)
Care coordination	2.7 l-----l 10	5.4	5.3 (±1.7)
Family orientation	3.4 l-----l 10	27.2	5.7 (±1.6)
Community orientation	1.5 l-----l 10	8.1	5.0 (±2.2)
Professional orientation	1.0 l-----l 10	24.3	5.6 (±3.0)
Essential score	1.1 l-----l 10	21.6	5.1 (±2.2)
Derivative score	1.0 l-----l 10	27.2	5.4 (±2.3)
General score	1.0 l-----l 10	21.6	5.2 (±2.3)

* Percentage of participants that assessed each attribute with a mean value ≥6.6; †SD = Standard Deviation.

In the analysis referring to the essential and derivative attributes evaluated, by professional category, the findings indicated homogeneous distribution in the evaluation regarding the gateway, access, continued care, integrality of the services provided, care coordination, family orientation, community orientation and professional orientation attributes. Heterogeneity was observed between the mean values when evaluating integrality of the services available and the professional categories (p-value=0.008). When applying the *Student's t test*, no significant association was observed between the studied variables, as all p-values were greater than 0.05, as shown in Table 2.

In Table 3 there is a significant regular positive correlation between Gateway/Family orientation (r=0.370), Access/Care coordination (r=0.392), Continued care/Family orientation (r=0.327), Integrality of the services available /Integrality of the services provided (r=0.341), and Community orientation/ Professional orientation (r=0.462). Professional orientation and Community orientation presented a significant and strong positive correlation with Care coordination: r=0.601 and r=0.651, respectively.

There was a significant and strong positive correlation between the General score/Care coordination and Community orientation; r=0.787 and r=0.745, respectively.

Table 2 – Distribution of the mean value and standard deviation corresponding to the Primary Health Care attributes in the assistance provided to children and adolescents with leprosy, as assigned by nurses and physicians; and comparison of the equalities of variances (Levene test) and of mean values (Student's t test). Parauapebas – Pará, Brazil, 2021 and 2022. (n=37)

Attributes	Nurses	Physicians	Levene test	Student's t test[*]		
	Mean (SD[†])	Mean (SD[†])	p-value	T[*]	p-value	CI[‡]
Gateway	6.2 (±2.1)	5.5 (±2.8)	0.118	0.453	0.653	-1.3-2.1
Access	3.5 (±1.4)	3.4 (±1.3)	0.443	0.321	0.750	-0.8-1.1
Continued care	4.0 (±1.9)	3.4 (±1.3)	0.252	1.111	0.274	-0.5-1.8
Integrality – Services available	6.4 (±1.6)	6.7 (±2.8)	0.008	-0.520	0.607	-1.8-1.1
Integrality – Services provided	4.8 (±2.5)	6.1 (±1.9)	0.062	-1.575	0.124	-2.8-0.3
Care coordination	5.3 (±1.9)	5.3 (±1.4)	0.126	0.012	0.990	-1.2-1.2
Family orientation	6.1 (±1.4)	5.1 (±1.8)	0.396	1.798	0.081	-1.2-2.1
Community orientation	5.3 (±2.2)	4.6 (±2.1)	0.541	0.937	0.355	-0.8-2.1
Professional orientation	5.7 (±1.7)	5.4 (±3.5)	0.355	0.303	0.764	-1.8-2.4
Essential score	5.1 (±2.1)	5.1 (±2.3)	-	-	-	-
Derivative score	5.7 (±2.2)	5.0 (±2.5)	-	-	-	-
General score	5.2 (±2.2)	5.1 (±1.7)	-	-	-	-

[*]T = Hypothesis test for comparison of mean values; [†]SD = Standard Deviation; [‡]CI = Confidence Interval.

Table 3 – Pearson's Correlation Coefficient between the mean scores corresponding to the Primary Health Care essential and derivative attributes in the assistance provided to children and adolescents with leprosy and with the general score. Parauapebas – Pará, Brazil, 2021 and 2022. (n=37)

Attributes	Gateway	Access	Continued care	Integrality of the services available	Integrality of the services provided	Care coordination	Family orientation	Community orientation	Professional orientation	General score
Gateway	1									
Access	-0.229	1								
Continued care	0.135	-0.163	1							
Integrality of the services available	0.222	0.320	0.128	1						
Integrality of the services provided	0.070	0.190	-0.267	0.341[*]	1					
Care coordination	0.070	0.392[*]	0.253	0.217	0.281	1				
Family orientation	0,370[*]	-0.230	0.327[*]	-0.071	-0.074	0.018	1			
Community orientation	0.324	0.202	0.093	0.205	0.281	0.651[*]	-0.061	1		
Professional orientation	0.037	0.025	0.055	-0.239	0.126	0.601[*]	-0.001	0.462[*]	1	
General score	0.475[*]	0.249	0.314	0.442[*]	0.477[*]	0.787[*]	0.256	0.745[*]	0.562[*]	1

[*]p-value<0.05

DISCUSSION

All the evidence, based on the main findings, indicates weaknesses in the attention to health care in children and adolescents with leprosy related to the low orientation of the service towards PHC; however, considering the correlation analysis, the qualification in Care coordination exerts a positive influence on Professional orientation and Community orientation. This result is corroborated by other studies carried out in the country, where the PHC attributes were specifically evaluated in a general context[6,14].

Given this evidence, in the current study, the implementation of more effective policies related to children's and adolescent's care as a premise for improving care quality remains a priority, mainly in regions where leprosy cases are hyperendemic. It is known that the presence of cases of the disease in the child population is a source for permanence of *M. bacteruim leprae* transmissibility in the community[12,15].

In this context, the systematic evaluation of the essential and derivative attributes of health services in PHC should support the decision-making process based on robust scientific evidence, which allows reformulating practices through managerial competence and incorporating production of information to be added to the care model for this population that is most vulnerable to illness[16].

In the current study, the characteristics of the participants, with the proportion of professionals with experience in providing care against the disease in the assessment of the assistance provided to children and adolescents with leprosy, suggest that, despite having training in professional care, this professional qualification does not support better care provided, indicated by low orientation in continued care. The issue of deficiency in the orientation of this attribute indicates care discontinuity and subsequent difficulty managing it[17]. Greater investments in qualified educational training are related to changes in teaching/learning focused on knowledge and skills capable of understanding the diversity of existing family organizations and their social processes[18].

Given the guided discussion, regarding weakness of the care provided to children and adolescents with leprosy, mainly referring to attributes related to Access and Continued care, the priority of implementing a care model is reinforced. Some studies reassert that the increase in the trend for hospitalizations due to PHC-sensitive conditions indicates the need to reorganize services, as well as to expand them and PHC resoluteness, so as to broaden population access to basic health services and, with this, drive improvements in the indicators related to leprosy and other priority diseases[17,19].

Another issue, regarding the main study findings, refers to the correlation analysis in view of the evidence on Care coordination, Professional orientation and Community orientation. The regular positive correlation indicated in most of the evaluated attributes and the strong positive correlation between Care coordination and Professional/Community orientation strengthen the implication in the expanded concept of reorganization of the services.

The individual/family/community interrelation should have a broader look between Care coordination and Professional orientation as a priority, as the community also corresponds to a territory and to social and cultural values permeated in the knowledge and practices adopted. In this way, it is necessary for health services to broaden their horizons and adapt to the modernity of new community arrangements, in order to meet health demands through territorial and participatory epidemiological planning[20].

Family orientation is another attribute that indicates greater attention to the family as the first care scenario, as well as understanding the meanings attributed to the different experiences. The family space represents a complex configuration of values, relationships and interactions where it is possible to develop health promotion, as well as to build bonds between its members and between them and the health service through its various interfaces[18].

As a tropical neglected disease[9], leprosy remains endemic in most of the Brazilian regions[15]. In this sense, although hyperendemic regions indicate a decreasing trend in the general leprosy incidence rate in children under 15 years of age[21], there is evidence of a growing trend and increase in cases diagnosed in the multibacillary form and with Grade 2 physical disability at the time of diagnosis. This fact may explain the weakness of the care provided to this vulnerable child population[21].

It is indispensable to discuss the role of physicians and nurses in Primary Care. It is necessary to implement measures seeking to strengthen the links established in the Primary Care attributes through governmental, professional, user and community accountability[22]. In this sense, using care protocols can contribute to qualifying these professionals, directing and standardizing the professional actions developed in these health services[23].

As responsible for ordering care through the referral and counter-referral system, PHC has in Care coordination the regulation of flows for care based on the SUS guidelines[5]. The National Policy for Primary Health Care points out in its guidelines universal and continuous access to good quality and resolute health services, mainly visualized by access to the health services that should welcome the users and promote the link and co-accountability for the attention to their health needs[22].

It is known that coordinated care means establishing connections and networks in order to achieve the prevailing objective of providing/meeting the users' needs and preferences in health care provision, with high value, quality, universality, equality and continuity[24]. The deficiency in the integration of the different care levels is one of the main determining factors for poor functioning of the service, as well as a good integration can contribute to an improvement in the quality of the services provided, which is configured as one of the main challenges faced by PHC[25]. That said, the importance contributed by these findings to the signaling of the positive correlations found between Care coordination and other attributes is observed.

It is known that there are several weaknesses in the consolidation and performance of Family Health teams throughout the country[22]. However, despite all the difficulties faced, the Family Health Strategy is still the most appropriate existing model in view of the existence of its attributes that promote bonding and accountability, providing support and assistance to families and reinforcing the importance of the bond between professionals, users and communities[26–27].

The Primary Care duties are basically concentrated on how it might contribute and participate in the responses of the measures established and adopted by reference centers and hospital care; however, health education and communication measures can be more effective in reducing problems, mainly in the specificity of leprosy care. There is a need for a more in-depth reflection about the assertive measures and those that are not effective in order to prepare for a greater breadth and magnitude of the PHC role in outbreaks and epidemics[28].

Primary Health centers, responsible for Primary Care, are essential to meet current health needs and provide safe assistance, thus preventing further Coronavirus transmission, ensuring adequate access and a gateway that guarantees availability of the services in different geographic areas. However, health resources diversion during the pandemic can be one of the factors hindering population's access to the full range of services[29].

A possible limitation of the current study is its non-probability and for convenience sample. However, through the statistical power, the data analyses indicated solid results. Future studies, mainly with larger sample populations, probabilistic and multicenter, can be useful, as well as carrying out a comparative study before and after the COVID-19.

CONCLUSION

Weaknesses were evidenced in the attention to health care in children and adolescents with leprosy related to low orientation of the service towards PHC. The presence of a regular positive correlation between the investigated attributes showed reflections on the orientation of the service towards PHC. However, qualification in Care coordination aimed at children and adolescents with leprosy tends to exert a positive influence on Professional orientation and Community orientation, with a possible impact on systematic surveillance of the available services.

The findings of this study can contribute to improving the care provided to children and adolescents with leprosy through the daily implementation of the notions and specifications of using the PHC essential and derivative attributes in the everyday routine of the service and, thus, establish the monitoring process for these indicators.

For future studies, it is indicated to validate the instrument used for data collection, as well as due calculation of the psychometric properties inherent in this process, conferring greater robustness to the evaluated questions and, therefore, providing health services with a questionnaire capable of measuring the characteristics of the care provided to children and adolescents with leprosy.

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NOTES

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