

Evaluation of the quality of primary health care for children and adolescents with HIV: PCATool-Brasil

Avaliação da qualidade da atenção primária à saúde de crianças e adolescentes com HIV: PCATool-Brasi

Evaluación de la calidad de la atención primaria a la salud de niños y adolecentes con VIH: PCATool-Brasil

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ABSTRACT

Objective: Assess the overall score of the Primary Health Care in municipalities where children and adolescents living with HIV reside, according to the PCATool-Brazil instrument, professional version.

Methods: Quantitative study with 527 professionals in 25 municipalities where children and adolescents living with HIV reside. Data collection took place between March and August 2014, by applying PCATool-Brazil instrument, professional version. In the data analysis, we used Pearson's chi-square test, the Mann Whitney test and Poisson regression. All ethical aspects were respected.

Results: The overall assessment of the Basic Health Unit (BHU) and the Family Health Strategy's (FHS) service quality was satisfactory (6.80). When BHU and FHS were compared, only the latter showed a high score (7.06).

Conclusions: Despite the satisfactory overall score, the need to expand the FSH coverage, and encourage the promotion of competitive public service examinations and the qualification of these professionals.

Keywords: Primary health care. Health services evaluation. Child health. Adolescent health. HIV. Nursing.

RESUMO

Objetivo: Avaliar o escore geral da Atenção Primária à Saúde nos municípios de residência de crianças e adolescentes com HIV, segundo o instrumento PCATool-Brasil, versão profissional.

Métodos: Estudo quantitativo, com 527 profissionais, em 25 municípios de residência de crianças e adolescentes com HIV. A coleta de dados realizou-se entre março e agosto de 2014, mediante aplicação do instrumento PCATool-Brasil, versão profissional. Na análise dos dados, utilizou-se o Teste Qui-quadrado de Pearson, Teste de Mann Whitney e Regressão de Poisson. Todos os aspectos éticos foram respeitados.

Resultados: A avaliação geral da qualidade dos serviços de Unidade Básica de Saúde (UBS) e Estratégia de Saúde da Família (ESF) foi satisfatória (6,80). Quando comparados UBS e ESF, somente este último apresentou um alto escore (7,06).

Conclusões: Apesar do escore geral satisfatório, confirma-se a necessidade de ampliar a cobertura de ESF, incentivar a promoção de concursos públicos e a qualificação destes profissionais.

Palavras-chave: Atenção primária à saúde. Avaliação de serviços de saúde. Saúde da criança. Saúde do adolescente. HIV. Enfermagem.

RESUMEN

Objetivo: Evaluar la calificación general de la Atención Primaria a la Salud en los municipios de residencia de los niños y adolecentes viviendo con VIH, según el instrumento PCATool-Brasil, versión profesionales.

Métodos: Estudio cuantitativo, con 527 profesionales, en 25 municipios de residencia de los niños y adolecentes viviendo con VIH. La recolección de datos se realizó entre marzo y agosto de 2014, mediante aplicación del instrumento PCATool-Brasil versión profesionales. En el análisis de los datos se utilizó el Test Qui-cuadrado de Pearson, el Test de Mann Whitney y Regresión de Poisson. Se respetaron los aspectos éticos.

Resultados: La evaluación general de la calidad de los servicios Unidad Básica de Salud (UBS) y Estrategia de Salud de la Familia (ESF) se presentó satisfactoria (6,80). Cuando se compara UBS y ESF, solamente este último presentó alta calificación (7,06).

Conclusiones: A pesar de la calificación general satisfactoria, se confirma la necesidad de ampliar la cobertura de ESF, incentivar la promoción de concursos públicos y la calificación de estos profesionales.

Palabras clave: Atención primaria de salud. Evaluación de servicios de salud. Salud del niño. Salud del adolescente. VIH. Enfermería.

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■ INTRODUCTION

The Acquired Immune Deficiency Syndrome (AIDS), caused by the Human Immunodeficiency Virus (HIV) is a disease that sill has no cure, but with scientific advances such as the introduction of antiretroviral therapy (ART), it is now considered a chronic condition⁽¹⁻²⁾.

The use of ART secured a higher quality of life and significant improvement in survival⁽²⁾, contributing to the epidemic affecting people of increasingly younger ages, due to virus infection in children and adolescents, with 201 AIDS cases reported in children aged 0 to 9 years of age, and 405 cases in adolescents 10-19 years of age, in Brazil, until June 2015⁽³⁾. Considering the recent years, 2012-2014, in the age groups of 0-9 years of age (597, 556 and 510) and 10-19 years of age (964, 1053 and 1057), a reduction in the number of cases in children was shown, but progressive increase in adolescents was also made evident⁽³⁾.

The monitoring of these children and adolescents permeates aspects related to social vulnerability, dependency on the care performed by professionals and family. This is the result of clinical weakness⁽⁴⁾, which indicates the need for continuous monitoring in the health services⁽⁵⁾, and, in turn, implies the programmatic vulnerability⁽⁶⁾, such as the need for health care, which should happen seamlessly between specialized services and Primary Health Care (PHC)⁽⁷⁾.

The PHC is the preferred service user input in the health system for all new needs and problems, and has strategic importance in structuring actions. It is characterized by its essential attributes (first contact access, longitudinality, comprehensiveness, care coordination) and derivatives (cultural competence, family counseling and community)⁽⁸⁾.

In Brazil, the PHC consists of the Family Health Strategy Services (FHS) and Basic Health Unit (BHU). The FHS is a proposal of the Ministry of Health for the reorganization of PHC, considered an alternative action to achieve the universalization goals, fairness and comprehensiveness⁽⁹⁾. Through attention focused on the family, with their physical and social context, it allows professionals a broader view of the needs and interventions that go beyond healing practices⁽⁹⁾.

However, the absence of formal or informal communication between services signals the fragmentation of care⁽¹⁰⁾. Thus, the daily care routine is restricted to specialized services, mainly due to its organization and the experience of their professionals⁽⁷⁾.

Fragmentation, in turn, intensifies the culture of searching for higher density technology services, encouraging

the perception that hospitals solve all problems related to health. Thus, PHC is not recognized as a source of first contact, which prevents the promotion of full and expanded attention. Thus, lack of bond generates dissatisfaction and distrust of the service⁽¹¹⁾. Thus, the PHC care routine involves the practice of the multi-professional team that has, at least, a doctor, nurse, nursing technicians and community health workers, and may include oral health professionals. It is noteworthy that the nurse plays a leading role in the team, in addition to the care and management activities, which contributes to the quality of care provided and, consequently, the health condition of the people and their community.

In this sense, the evaluation of PHC services through the presence and extent of its attributes is essential, allowing the identification of needs related to the entire population, including those living with HIV, as well as the reorganization of actions for health care quality⁽⁸⁾. One way to identify whether the services and PHC are oriented according to their attributes through the instrument Primary Care Assessment Tool (PCATool-Brazil), available in child version, adults and professionals⁽¹²⁾.

The productions include the population of children and adolescents, however, although there is research applied to the specificity of infectious diseases (like tuberculosis and leprosy), this study is unique in relation to HIV infection.

Given the above, the research question was defined as: what is the general score of PHC in municipalities where children and adolescents living with HIV reside, from the experience of professionals? The objective of the study was to evaluate the overall score of PHC in municipalities where children and adolescents living with HIV reside, according to the PCATool Brazil instrument, professional version.

METHODOLOGY

This was a survey with quantitative approach of cross-sectional design, which used the database of the matrix project "Evaluation of primary health care of children and adolescents with HIV."

The survey of sites for data collection occurred through the identification of municipalities where children and adolescents living with HIV reside, and who were continuously monitored at the infectious disease clinic at a university hospital in the Midwest region of the Rio Grande do Sul state, Brazil. It is appropriate that this service is a reference for specialized care for HIV within the state. They identified 26 municipalities for the population, of which only one health department did not authorize the collection of data.

Therefore, the research took place in 25 municipalities in the state of Rio Grande do Sul, Brazil, from March to August 2015, with professionals from 168 services, comprising 60 BHS services and 108 FHS services.

Inclusion criteria were: doctor, nurse and dentist who acted in PHC. professionals on vacation, or away during the collection period were excluded. The population totaled 596 professionals of which 42 (7%) did not meet the inclusion criteria. There were 27 losses (4.9%), for 12 professionals refused to participate and 15 were not found. Thus, the population surveyed was comprised of 527 professionals, among which, paediatricians, gynecologists and general practitioners, nurses and dentists. Therefore, sample size was not calculated.

During data collection, we used a tool for characterization of professionals, composed of sociodemographic variables (sex and age), academic training (training, time since graduation, graduate programs, graduate program completion and further training) and occupational situation (link to the service, length of service, position in service and having another job). The Primary Care Assessment Tool (PCATool-Brazil), Professional version was also used⁽¹²⁾ for the evaluation of health care quality through the presence and extent of the attributes of PHC⁽⁸⁾.

The PCATool instrument consists of 77 items, divided into eight components in relation to the attributes of PHC. The answers are in Likert scale, as follows: "definitely" (value = 4), "probably" (value = 3), "probably not" (value = 2), "certainly not" (value = 1) and "I do not know/do not remember" (value = 9). The answers marked "I do not know/do not remember" were considered "probably not" $^{(12)}$.

Data were entered into THE Epi-Info® program, version 7.0, with independent double typing, after checking for errors and inconsistencies. Data analysis was performed using the Statistical Analysis System (SAS) version 9.3.

The scores, essential and derivative, were calculated by the arithmetic mean of their respective attributes and the overall score, the arithmetic mean of the scores of the essential attributes and derivatives⁽¹²⁾. The values that originally vary in scale of 1 to 4 were processed on a continuous scale from 0 to 10, according to the formula: score from 0 to 10 of attribute $X = (score\ 1\ to\ 4\ of\ attribute\ X - 1)\ x\ 10/\ (4-1)$. A high score is considered as one with value> 6.6, which corresponds in the scale from 1 to 4 to score 3 ("probably")⁽¹²⁾.

The reliability of the PCATool instrument was carried through Cronbach's alpha (consistency indicators were considered values >0.7). Categorical variables were presented as absolute, and relative frequency and continuous variables, average, standard deviation, median, minimum and maximum.

The Chi-square test was used to compare the proportions of dichotomized scores (high score and low score) of the PHC attributes in the variables of socio-demographic profile, training and employment situation of the professional, and the Mann Whitney test was applied to perform the comparison of the scores regarding PHC attributes assigned by professionals, according to the type of service (FHS or BHS). For all statistical analyzes, the significance level of 5% was adopted.

Poisson regression with robust variance was applied for verification of variables associated with high scores. Therefore, the prevalence ratios (PR) and their respective confidence intervals (95% CI) were estimated. In the crude and adjusted analysis, the independent variables were associated with a high score of p value <0.25.

The research was approved by the Research Ethics Committee of the Federal University of Santa Maria, CAAE No. 12223312.3.0000.5346/2013, Opinion No. 533126 of January 30, 2014. All participants signed a Free and Informed Consent Form and a Confidentiality Agreement, respecting the ethical aspects contained in Resolution No. 466, of December 12, 2012, by the National Health Council of the Ministry of Health of Brazil, which provides for research involving human beings.

RESULTS

The characterization of the population, the types of services and existence of specialized HIV services in 25 municipalities where of children and adolescents living with HIV reside is found in Table 1.

In the assessment of the PHC's quality by health professionals from 25 municipalities participating in the study, the overall score of PHC, estimated by PCATool-Brazil, professional version, presented a high guidance score for PHC (Table 2).

Table 3 contains the sociodemographic characteristics, training and occupational status of professionals, according to the high and low overall score for PHC. There was significance in the following variables to the high score: age less than 30 years old, professional training as general practitioner and nurses, less training time than or equal to 15 years, conclusion of graduate program equal to or less than six years, a public worker in service and does not have another job.

As for the comparison between the PHC services, a significant difference in favor of FHS services was verified from the overall score, considered satisfactory in the assessment of professionals, and unsatisfactory in the assessment of BHS services (Table 4).

Table 5 shows the gross and adjusted Poisson regression adjusted for independent variables associated with the high score of PHC in relation to health care for chil-

dren and adolescents with HIV in the experience of health professionals of 25 municipalities of Rio Grande do Sul. After adjustments, they were shown to be associated to

Table 1 – Characterization of the 25 municipalities where children and adolescents living with HIV reside in Rio Grande do Sul / Brazil, 2015. (N=168)

Combo	Approximate	Coverage by typ	Services Specialized			
County	population*	BHS (n=60)	FHS (n=108)	in HIV†		
São João do Polêsine	2,651 inhabitants	01	0	No		
Dilermando de Aguiar	3,136 inhabitants	01	0	No		
São Martinho da Serra	3,306 inhabitants	01	0	No		
Maçambará	4,824 inhabitants	01	0	No		
Coronel Bicaco	7,823 inhabitants	01	03	No		
Redentora	11,025 inhabitants	01	03	No		
Jaguari	11,590 inhabitants	01	01	No		
Cacequi	13,685 inhabitants	0	04	No		
Tenente Portela	14,039 inhabitants	0	03	No		
Restinga Seca	16,334 inhabitants	02	01	No		
São Pedro do Sul	16,788 inhabitants	0	04	No		
Júlio de Castilhos	20,052 inhabitants	02	05	No		
Tupanciretã	23,521 inhabitants	02	03	No		
Quaraí	23,579 inhabitants	01	06	No		
São Sepé	24,432 inhabitants	02	03	No		
Caçapava do Sul	34,654 inhabitants	0	05	No		
Palmeira das Missões	34,974 inhabitants	01	06	SAE(CTA)		
São Luiz Gonzaga	35,193 inhabitants	0	08	No		
Santiago	50,635 inhabitants	0	11	SAE/SAT‡		
Venâncio Aires	69,859 inhabitants	04	03	CADI‡		
Alegrete	78,499 inhabitants	01	12	SAE/SAT‡		
Santo Ângelo	78,976 inhabitants	05	09	Emergency Room		
Cachoeira do Sul	85,712 inhabitants	02	05	No		
Uruguaiana	129,652 inhabitants	13	0	SAE(CTA)		
Santa Maria	276,108 inhabitants	18	13	HUSM‡ e CTA		

Source: *Brazilian Institute of Geography and Statistics (IBGE). Available at: http://www.cidades.ibge.gov.br/xtras/uf.php?lang=&coduf=43&search=rio-grande-do-sul † List of Specialized Care Services (SAE) and Testing and Counseling Centers (CTA) of Rio Grande do Sul State, Brazil, in 2015. Available at: http://www.saude.rs.gov.br/upload/1416941626_lista%20SAE%20CTA.pdf #SAT- Attention Therapy Service; CADI- Center for Infectious Diseases and HUSM- University Hospital of Santa Maria.

Table 2 – Descriptive statistics of the PHC's overall score, in experience of health professionals of 25 municipalities of Rio Grande do Sul / Brazil, 2015. (N=527)

Score (0-10)									
PHC Feature	Mean	Standard deviation	Median	Min	Maximum	Cronbach Alpha			
Overall score	6.80	1.05	6.85	2.63	9.18	0.86			

Source: Research data, 2015.

Table 3 – Socio-demographic profile of the training and occupational status of health professionals from 25 municipalities of Rio Grande do Sul / Brazil, according to the evaluation of high and low scores for the overall score of the PHC, 2015. (N=527)

	PCATool-Brasil					
Variable	High score (General (≥6.6)	Low score (
	n	%	n	%	p*	
Age					0.015	
≥30 years	53	10.06	54	10.25		
<30 years	262	49.72	158	29.98		
Sex					0.417	
Female	207	39.28	132	25.05		
Male	108	20.49	80	15.18		
Education					< 0.001	
General Practitioner	124	23.53	50	9.49		
Gynecologist	17	3.23	21	3.98		
Pediatrician	19	3.61	14	2.66		
Nurse	105	19.92	62	11.76		
Dentist	50	9.49	65	12.33		
Time since graduation				,	0.005	
≤15 years	183	34.79	91	17.30		
>15 years	131	24.90	121	23.00		
Graduate Studies					0.435	
Absent	79	14.99	59	11.20	0.100	
Residency	57	10.82	47	8.92		
Specialization	168	31.88	98	18.60		
Master's degree	11	2.09	8	1.52		
Graduate course completion (n = 390)		2.00	Ü		0.005	
≤6 years	138	35.38	67	17.18		
>6 years	99	25.38	86	22.05		
Additional training		23.30	00	22.03	0.464	
Yes	263	49.91	182	34.54	0.101	
No	52	9.87	30	5.69		
Employment	32	5.07	30	5.05	0.011	
Private Employee	91	17.30	45	8.56	0.011	
Public Worker	219	41.63	157	29.85		
Outsourced	4	0.76	10	1.90		
Service time	7	0.70	10	1.50	0.072	
≤3 years	170	32.32	97	18.44	0.072	
>3 years	145	27.57	114	21.67		
Position in service	143	21.31	1 1 4	∠1.0/	0.439	
Yes	57	10.84	33	6.27	U. 4 39	
No	57 257	10.84 48.86	33 179	34.03		
What position (n = 88)	23/	40.00	1/9	34.03	0.068	
Responsible Technicians	10	1 / 77	1 /	15.01	0.008	
Coordinator	13	14.77	14	15.91		
	42	47.73	15	17.05		
Responsible for ACS	1	1.14	2	2.27	0.043	
Have another job	150	20.02	122	22.15	0.043	
Yes	153	29.03	122	23.15		
No	162	30.74	90	17.08		

Source: Research data, 2015.

^{*}Pearson's chi-square test

Table 4 – Comparison of PHC of overall scores in relation to health care for children and adolescents with HIV in the experience of health professionals of 25 municipalities of Rio Grande do Sul / Brazil, 2015. (N=527)

Scores (0-10)									
	BHS (n=270)				FHS (n = 257)				
	Mean	Standard deviation	Min	Maximum	Mean	Standard deviation	Min	Maximum	p*
Overall score	6.55	1.12	2.63	8.94	7.06	0.88	4.70	9.18	<0.001

Source: Research data, 2015.

Table 5 – Gross Poisson regression adjusted for independent variables associated with the high score of PHC in relation to health care for children and adolescents with HIV in the experience of health professionals of 25 municipalities of Rio Grande do Sul / Brazil, 2015. (N=527)

	High score							
Variables	DD*	CI 95% †				CI 95%†		
	PRg*	Min	Maximum	р	PRa‡	Min	Maximum	ъ
Age								
≤30 years	1.095	0.836	1.436	0.509	1.170	0.861	1.590	0.316
>30 years	ref				ref			
Education								
General Practitioner	0.771	0.504	1.180	0.231	0.754	0.472	1.206	0.239
Nurse	1.041	0.693	1.563	0.847	0.910	0.552	1.498	0.710
Dentist	0.899	0.583	1.387	0.631	0.843	0.529	1.344	0.474
Gynecologist	0.579	0.302	1.109	0.099	0.575	0.302	1.092	0.191
Pediatrician	ref				ref			
Graduation								
≤15 years	1.030	0.8360	1.2690	0.7810	0.829	0.6060	1.1340	0.2400
>15 years	ref				ref			
Graduate course completion								
≤6 years	1.256	0.991	1.591	0.06	1.300	0.958	1.763	0.092
>6 years	ref				ref			
Employment relationship								
Public Worker	1.480	0.641	3.417	0.358	1.992	1.386	2.863	<0.001
Private Employee	1.235	0.523	2.916	0.63	1.649	1.118	2.245	<0.001
Outsourced	ref				ref			
Have another job								
No	0.866	0.703	1.066	0.175	0.835	0.62	1.125	0.835
Yes	ref				ref			
Service time								
≤3 years	0.989	0.803	1.217	0.913	0.905	0.697	1.175	0.452
>3 years	ref				ref			

Source: Research data, 2015.

†CI 95% — Confidence Interval 95%; ‡PRa — Poisson regression adjusted for:: Age, Training, Graduation, Completion of Graduate Studies, Employment relationship, having another job and service time; ref — the reference value

^{*} Mann Whitney test

the high score: completion of graduate course \leq 6 years; and public employment.

DISCUSSION

The instrument PCATool-Brazil, professional version that was used pointed out that the services were satisfactory in providing attention to the health of children and adolescents living with HIV, according to the overall score (6.80). In a study conducted in small and mid-sized municipalities of the Alfenas micro region, Minas Gerais, with extensive coverage of the FHS and actions for the training of these professionals, the evaluation also showed a high score (7.40)⁽¹³⁾.

The results were similar to another study with PHC professionals involved in PHC services in Chapecó, Santa Catarina, which, during the study period, had a network of recent expansion of PHC services and 86% of FHS coverage, which also obtained, a high overall score (7.09)⁽¹⁴⁾.

Likewise, there was an overall high score (7.00) in a survey conducted in Montes Claros, Minas Gerais, which evaluated PHC services, from the perspective of residents and registered users in the coverage areas of FHS teams⁽¹⁵⁾, diverging from the results found in another study, conducted in the same city with caregivers of children from birth to two years, in which users rated the PHC services as unsatisfactory⁽¹⁶⁾.

This result indicated that the professionals from the original municipalities of children and adolescents with HIV, assessed the PHC services demonstrate quality care to this population. However, the daily care routine indicates that attention to this population also focuses on specialized service. It reveals the model of care for acute health conditions, which indicates the need for reorganization to care for chronic conditions. This may require users to access and develop ties with the PHC service, close to his home, without their transfer to a specialized center being determined due to their health condition. Thus, there is potential for coordination of care by PHC, and communication between the services for longitudinality and comprehensive care⁽¹⁾.

Regarding the score correlation (high/low), with the characteristics of professionals, the variable age (<30 years), showed a significant upward overall score, opposing the average age found in one study in Porto Alegre (>40 years) (17), and another study in Curitiba (>35 years)(18).

As for vocational training, the following stood out: general practitioner and nurse, with a prevailing training time equal to or less than 5 years, and completion of graduate courses or equal to or less than six years. Compared to other studies, the professional profile appeared similar⁽¹⁷⁻¹⁸⁾.

The professionals' time of training diverged when the medical professional with a training time over 15 years was considered⁽¹⁸⁾, and converged, when considering the nurse, whose training ranged from 9.4 to 13 years in PHC health services⁽¹⁸⁾. As for the time of completion of graduate school, it was not possible to make comparisons, since other studies are turned only to the fact that the professional has such diploma ^(13-14,17-18), or even if it was focused on PHC^(13 to 14,17).

The employment situation that prevailed was that of public workers, without another job, similar to data found in a survey wheret the only employment of professionals was the PHC service. In these places, make up weekly workload of 40 hours of work⁽¹³⁾.

The results, which indicated a significant relationship between the quality of PHC and the employment situation (public worker) of the professional and time since graduate course completion, pointed to the need for investment in training and continuing education, enabling the strengthening of the professional practice.

In the compared score (high / low) between the types of service (FHS / BHS), a low score (6.55) was achieved for the BHS service, and a high score (7.06) for the FHS, presenting greater presence and extent of the PHC attributes.

These findings corroborate the study in Porto Alegre, where BHS services were also considered unsatisfactory (6.58), with higher scores for services with FHS (7.08)⁽¹⁷⁾, as in the comparison performed by users of Colombo, metropolitan region of Curitiba, in which the FHS services were considered satisfactory (6.6) and BHS, unsatisfactory (3.9), with a value below the cut⁽¹⁹⁾.

However, another survey of professionals pointed out that both services have obtained satisfactory assessments of the overall score (BHS = 6.70 vs FHS = 7.40), but significantly higher value was given for the FHT services⁽¹⁸⁾.

The high score in the FHS indicated the need to expand the coverage of this type of service, since the evaluation verified by PCATool demonstrated a statistically significant quality in this type of service. Among the challenges for Brazilian PHC consolidation, an increased family health coverage was shown as key⁽²⁰⁾.

These findings showed the importance of evaluation, from different experiences, in view of the different weightings between users and professionals. In addition, the evaluation of PHC services in different locations may help to understand the real picture of the Brazilian primary care, in order to collaborate with the intensification of actions for the qualification of these services.

As a limitation, there is the fact that the instrument is not specific to people with HIV, preventing the assessment

of peculiarities. Therefore, the generalization of data should be made with caution. However, the implementation of the unprecedented nature of this instrument in the context of infectious diseases denotes the relevance of similar assessments that can serve as a basis for improvement of actions and public policies.

CONCLUSION

It is concluded that the instrument used, PCATool-Brazil, professional version, although not specific to the population living with HIV, obtained a satisfactory score, indicating that the PHC services have the potential to serve children and adolescents living with HIV. This is a recommendation from Brazilian public policy, evidenced through research. However, the culture of specialty overlaps even in their everyday life, reflecting the transfer of users with HIV to specialized service. It is suggested that children and adolescents with HIV are referred to specialists to meet the specifics of their chronic condition and continue attending the PHC services for other health demands such as, for example, monitoring of their growth and development.

Comparing the services, only those with FHS were shown to focus on the defining attributes of the PHC, which highlights the need to expand the coverage of these services. The identification of variables associated with high overall score of PHC pointed to the importance of attracting human resources through public procurement. The variable graduate school time of completion indicated the need for investments in the qualification of these professionals, through the fostering of postgraduate courses and continuing education activities, providing a more qualified assistance to users.

Finally, there are the contributions of this study for teaching, considering the possibility of expanding the discussions related to the care of children and adolescents with HIV, under the care model perspective to chronic conditions, advocating the integration between the different points of the health care network, under the coordination of PHC. For assistance, the possibility of investments in communication between the services was envisioned. It is also urgent that services determine the tasks to meet the health needs of this population and when referral is indicated. This integration between services can be established by means of a flow of users in the health system.

Considering the leading role played by nurses, the possibility of investments to: identify children and adolescents with HIV in the territory of PHC services can be signaled; establish communication with the specialized service in

which monitoring is maintained; actively search for this population; propose monitoring of child care, and the promotion of adherence to treatment. These can be some possibilities of contribution for the practice of nursing care, in order to enhance the access of this population in BHS/FHS, the completeness and longitudinality in care, under the coordination of PHC.

And finally, this study points to the need for investment in new research aimed at adaptation and validation of an assessment tool that is specific to people living with HIV.

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