Original Article

Longitudinality of Primary Health Care: an evaluation from the perspective of users

Longitudinalidade do cuidado na atenção primária: avaliação na perspectiva dos usuários

Longitudinalidad del cuidado en la atención primaria: evaluación desde la perspectiva de los usuarios

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Descritores
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Descriptores
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Abstract
Objective: research aims to evaluate the longitudinality of Primary Health Care (PHC) from the perspective of its users, verifying the association between the population size, Human Development Index (HDI) and Family Health Strategy (FHS) coverage among the municipalities of a Regional Health Coordination in the Southern region of Brazil.
Method: cross-sectional study, conducted with 1,076 PHC adult users from 32 municipalities of the 4th Regional Health Coordination of Rio Grande do Sul, from February to June 2015. Data were collected with the Adult Primary Care Assessment Tool and analyzed with the Statistical Package for the Social Sciences software. The Mann-Whitney and Kruskal Wallis tests were used to compare the means.
Results: the level of affiliation had a high score (8.6; CI95%: 8.5-8.8) and the longitudinality obtained an unsatisfactory score (6.4; CI95%: 6.3-6.5). The fragilities related to the attribute were the interpersonal relationship between users and professionals; the recognition of users in their comprehensiveness, and the preparation of professionals to assist users. Longitudinality was better evaluated in municipalities with lower population size, lower HDI and higher FHS coverage.
Conclusion: longitudinality is unsatisfactory and reveals the need for reorienting PHC and conducting vocational training. However, the greater coverage of FHS suggests that this care model contributes to qualify this attribute.

Resumo
Objetivo: avaliar a longitudinalidade do cuidado na Atenção Primária à Saúde (APS) na perspectiva dos usuários, verificando a associação com o porte populacional, índice de desenvolvimento humano e cobertura de Estratégia Saúde da Família (ESF) entre os municípios de uma Regional de Saúde no Sul do Brasil.
Método: estudo transversal, realizado com 1.076 usuários adultos da APS de 32 municípios da 4ª Coordenadoria Regional de Saúde do Rio Grande do Sul, de fevereiro a junho de 2015. Os dados foram coletados com o instrumento Primary Care Assessment Tool versão adulto e analisados com o programa Statistical Package for the Social Sciences. Para a comparação de médias utilizou-se o teste Mann-Whitney e Kruskal Wallis.
Resultados: o grau de afiliação foi avaliado com alto escore (8,6; IC95%:8,5-8,8) e a longitudinalidade obteve um escore insatisfatório (6,4; IC95%:6,3-6,5). As fragilidades relacionadas ao atributo foram a relação interpessoal entre o usuário e profissional; o reconhecimento do usuário em sua integralidade e o preparo dos profissionais para auxiliar os usuários. A longitudinalidade foi melhor avaliada nos municípios com menor porte populacional, menor índice de desenvolvimento humano e com maior cobertura de ESF.
Conclusão: a longitudinalidade é insatisfatória e revela a necessidade de reorientação da APS e da formação profissional, contudo a maior cobertura da ESF sugere que esse modelo assistencial contribui para qualificar esse atributo.

Resumen
Objetivo: Analizar la longitudinalidad del cuidado en la Atención Primaria de Salud (APS) desde la perspectiva de los usuarios y verificar su relación con el tamaño de la población, índice de desarrollo humano y cobertura de la Estrategia Salud de la Familia (ESF) en los municipios de una Regional de Salud en el sur de Brasil.
Método: Estudio transversal, realizado con 1076 usuarios adultos de la APS de 32 municipios de la 4ª Coordinación Regional de Salud del estado de Rio Grande do Sul, de febrero a junio de 2015. Los datos fueron recolectados con la herramienta Primary Care Assessment Tool versión adulto y analizados con el programa Statistical Package for the Social Sciences. Para la comparación de promedios se utilizó la prueba Mann-Whitney y Kruskal Wallis.
Resultados: El nivel de afiliación fue evaluado con alta puntuación (8,6; IC95%:8,5-8,8) y la longitudinalidad obtuvo una puntuación insatisfactoria (6,4; IC95%:6,3-6,5). Las debilidades relacionadas al atributo fueron la relación interpersonal entre el usuario y el profesional, el reconocimiento del usuario en su integralidad y la preparación de los profesionales para dar auxilio a los usuarios. La longitudinalidad fue mejor evaluada en los municipios con menor población, menor índice de desarrollo humano y mayor cobertura de la ESF.
Conclusión: La longitudinalidad es insatisfactoria y revela la necesidad de reorientación de la APS y de la formación profesional. No obstante, la mayor cobertura de la ESF sugiere que ese modelo asistencial contribuye para cualificar ese atributo.

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Introduction

Longitudinality is an attribute that plays an important role in guaranteeing health care[1] and, together with other essential and derivatives attributes – attention to the first contact, comprehensiveness, coordination of care, family and community orientation and cultural competence – confers greater effectiveness and quality to PHC services.[2]

The attribute of longitudinality presupposes the existence of a continuous source of attention and its use over time, containing aspects of bonding, the creation of interpersonal relationships and trust among users and health professionals.[2,3] Nonetheless, the idea of continuity of care is often misused for longitudinality. These are different terms, since the continuity of care represents the sequence of consultations or visits to the health unit, not necessarily with the same professional or service, being directed to the management of problems or illness and not to the attention to individuals.[2]

Longitudinality allows knowing users better, their family and social context, behaviors, habits and health problems, enabling the planning of appropriate care and interventions. Thus, providing comprehensive care is the best-case scenario, with actions to prevent diseases and promote health, and reduce the use of services of high complexity and the health costs.[2,4]

The Brazilian Unified Health System (*Sistema Único de Saúde* – SUS) incorporates in its principles and guidelines the longitudinality of care to be implemented in PHC.[5] In Brazil, PHC has included the provision of different health care models, for example, the traditional model that has been replaced over the years by the FHS. The FHS is being adopted as a model to expand and reorganize PHC according to SUS guidelines, highlighting its more positive performance in relation to the quality of primary care,[3,6,7] access to and use of the service, promoting equity[8,9] and better health outcomes for the population,[10-12] in comparison with the traditional model.

In this context, considering the benefits of longitudinality in health care, the recognition of this attribute as a central characteristic of PHC is timely and should be sought and evaluated.[1] Based on the assumption that the FHS model presents better performance and quality of care, its coverage should be considered when assessing longitudinality. In addition to this, the expansion, organization and consolidation of PHC can occur in different forms and magnitude in municipalities, depending on the population size and the HDI. It is noteworthy that there is a scarcity of quantitative studies aimed at evaluating, separately, an attribute of PHC and its relationship with municipal and health service aspects.

In this sense, the research questions were: what is the PHC longitudinality score from the perspective of users? Is there an association between longitudinality and the municipality population size, the HDI and the FHS coverage? The objective of this study was to evaluate the longitudinality of PHC from the perspective of its users, verifying the association between the population size, the HDI and the FHS coverage among the municipalities of a Regional Health Coordination in the Southern region of Brazil.

Methods

A cross-sectional population study carried out in the PHC of the 32 municipalities that belong to the 4th Regional Health Coordination (4ª CRS) of the state of Rio Grande do Sul, Brazil. The 4th CRS/RS is located in the central region of the state and its population was estimated, in 2014, at 559,498 inhabitants.[13]

The target population of this study were the adult users of PHC and the sample size was defined by calculation $n = \frac{Z^2_{\alpha/2}.\hat{p}.\hat{q}.N}{e^2(N-1) + Z^2_{\alpha/2}.\hat{p}.\hat{q}.}$, where: tabulated value is 1.96 ($Z^2_{\alpha/2}$), estimated percentage ($\hat{p}$) equal to 0.5, ratio of population that did not belong to the study interest equal to 0.5($\hat{q}$), sampling error equal to 0.03 (3%) (e), confidence level corresponding to 5% (α) and population size of 406,741 individuals (N). A stratified sample was calculated by municipality, totaling 1,065 people in the region, and 1,076 users were interviewed.

Health units and users were selected by convenience sampling (non-probabilistic). When it was not possible to evaluate all the health units in the municipality, some of each municipality region were selected to cover all socioeconomic contexts, including Primary Care teams (PCt) and Family Health teams (FHt).[5]

The inclusion criteria were: users of PHC services aged ≥18 at the time of the interview. First-time users of PHC services and users without cognitive health conditions to respond to the research tool were excluded. Users were approached in the health services while awaiting care. Participants were informed about the research objectives and signed the Informed Consent Term.

Data were collected between February and June 2015 and the questionnaires were applied by six masters of the Nursing Postgraduate Program of the Federal University of Santa Maria (*Universidade Federal de Santa Maria* – UFSM), previously prepared. The interviewers had no relation with the health services surveyed. Data were collected through a mobile device (tablet), using the app Epi Info version 7.0. To characterize participants, an instrument was used with demographic and socioeconomic variables, including gender, age, education, self-reported ethnicity, number of children and family income.

The study outcome was the longitudinality attribute of the PHC (care process),[15] evaluated with the research tool Adult Primary Care Assessment Tool (PCATool), validated in Brazil[14] and applied in the interview format. For this, the level of user's affiliation to the service (structure component),[15] was used to evaluate the range for the attribute. This level varies from one to four, and is defined from an algorithm specified in the manual of the evaluation instrument (Brazil, 2010).[15]

The longitudinality score was defined by means of arithmetic mean of the 14 items (questions) contained in the instrument, the answers presented on the Likert scale, with an interval of one to four: one= certainly not; two= probably not; three= probably yes; and four= certainly yes. When the sum of "do not know/do not remember" (=nine) answers reached 50% or more of longitudinal items, the questionnaire was excluded, otherwise these responses were considered as "probably not".[15] In this process, nine questionnaires were excluded, with a final sample of 1,067 adult users.

In the next step, the score obtained for the level of affiliation and for longitudinality was transformed into a scale from zero to ten to obtain the final score, through the following calculation: (score obtained - 1)*10/4-1. Scores were then dichotomized using the cut-off point 6.6: low score (<6.6) and high score (≥6.6).[15]

Data were analyzed using the program Statistical Package for the Social Sciences version 16.0 for Windows. The distribution of variables normality was evaluated using the Shapiro Wilk test. Qualitative variables were expressed as absolute and relative frequencies; and quantitative variables such as median, mean and standard deviation (SD), with a 95% confidence interval (CI). The Cronbach's alpha was applied to evaluate the reliability of answers, considering ≥0.70 as reliable.[16]

The difference between the mean longitudinal scores according to the following characteristics was found: size of the municipality[13](up to 10,000 inhabitants; 10,001 to 30,000; 30,001 to 100,000; 100,001 or more inhabitants); the Municipality Human Development Index (MHDI)[13], ranked 50th in percentile (0.631 to 0.766 and 0.767 to 0.784) due to small variation in the general HDI range among the municipalities in the region; and population coverage of FHS[17] (up to 30%; from 30 to 64.9%; and 65% or more).

The Mann-Whitney U test was used to compare the scores according to the MHDI, and according to population size and FHS coverage, the Kruskal Wallis test followed by Dunn Post Hoc were used to identify which pairs of groups differ; group "a" was different from "b" and both differing from "c". All statistical analyzes were performed considering a significance level of 5% ($p<0.05$).

This study was approved by the Research Ethics Committee of UFSM, under the number of the Certificate of Presentation for Ethical Appreciation: 34137314.4.0000.5346, following the ethical precepts of Resolution of the National Health Council 466/2012.

Results

Regarding users characterization, 76.3% (n=814) of the participants were women, average age was 42.5 years old (SD: 15.7), with a minimum age of 18 and a maximum of 91; 69.6% (n=740) declared them as white; 52.7% (n=561) reported having one or two children; 55.1% (n=586) of users had primary or lower education; and 76.9% (n=817) had a family income of two monthly minimum wages or less. In the evaluation regarding the level of affiliation, a high score was obtained (8.6; CI95%: 8.5-8.8). As for the assessment of longitudinality, the estimated score by the Adult PCATool-Brazil, had a low score (6.4; CI95%: 6.3-6.5). However, it was close to the value considered satisfactory (≥6.6), according to table 1. The result was evaluated as reliable (0.818).

Table 1. Level of affiliation and longitudinality scores in PHC in the municipalities of the 4th Regional Health Coordination (n=1,067)

Components	General Score (0-10)		High Score (≥6.6)	Low score (<6.6)
	Mean (CI95%)	Median	n(%)	n(%)
Level of affiliation	8.6 (8.5-8.8)	10	964 (90.4)	103 (9.7)
Longitudinality score	6.4 (6.3-6.5)	6.43	528 (49.5)	539 (50.5)

From the longitudinality score, the detailed items that compose this attribute and evaluation are presented for better understanding (Table 2). The items that obtained a result <50% in the sum of the proportions "certainly yes" and "probably yes" on the Likert scale were considered fragilities. In this sense, according to users, 30.0% (n=320) reported they were able to talk to the professional they know best, in case of doubts; to 39.3% (n=418) the professional knows him/her more as a person rather than only as a patient with a health problem; 46.9% (n=500) reported that the professional knows who they live with; and to 45.5% (n=485) the professional knows their occupation. With a proportion above >50% for "certainly yes" and "probably yes" answers, 52.8% (n=562) answered that the professional knows which problems are most important to the user; to 59.0% (n=629) the professional would help if they had problems obtaining medicines. These items can still be considered as gaps in longitudinal care. It was noted that 65.1% (n=695) of participants said that they would change their responsible professional or service if it were possible and/or made available.

Table 2. Percentage distribution of the PHC users' responses to items belonging to the longitudinality attribute in the municipalities of the 4th Regional Health Coordination (Cronbach's Alpha= 0.818, n=1,067)

Longitudinality items	Assessment (Likert scale)				Total
	Certainly not	Probably not	Probably yes	Certainly yes	
	n(%)	n(%)	n(%)	n(%)	
D1	288(28.0)	82(7.7)	134(12.5)	563(52.8)	100.0
D2	24(2.3)	43(4.0)	170(15.9)	829(77.8)	100.0
D3	28(2.6)	44(4.1)	99(9.4)	894(83.9)	100.0
D4	517(48.6)	228(21.4)	111(10.4)	209(19.6)	100.0
D5	84(7.9)	50(4.7)	90(8.4)	842(79.0)	100.0
D6	69(6.5)	35(3.3)	73(6.9)	886(83.3)	100.0
D7	530(49.8)	16(10.9)	120(11.3)	298(28.0)	100.0
D8	477(44.8)	88(8.3)	80(7.5)	420(39.4)	100.0
D9	383(35.9)	120(11.3)	147(13.8)	415(39.0)	100.0
D10	294(27.6)	80(7.5)	184(17.3)	508(47.6)	100.0
D11	490(46.0)	91(8.5)	89(8.3)	396(37.2)	100.0
D12	297(27.9)	140(13.1)	169(15.9)	460(43.1)	100.0
D13	230(21.6)	45(4.2)	126(11.8)	665(62.4)	100.0
D14	278(26.1)	94(8.8)	109(10.2)	586(54.9)	100.0

Notes: D1- When you go to your "service/doctor/nurse", is it always the same professional that helps you? D2- Do you think your "doctor/nurse" understands what you say or ask?; D3- Does your "doctor/nurse" answer your questions in an intelligible way for you?; D4- If you have a question, can you call and talk to the doctor or nurse who knows you the best?; D5- Does your "doctor/nurse" give you enough time to talk about your concerns or problems?; D6- Do you feel comfortable telling your concerns or problems to your "doctor/nurse"?; D7 Does your "doctor/nurse" know you more as a person than just someone with a health problem?; D8- Does your "doctor/nurse" know with whom you live?; D9- Does your "doctor/nurse" know which problems are most important to you?; D10- Does your "doctor/nurse" know your complete medical history?; D11- Does your "doctor/nurse" know about your job or profession? D12 - Would your "doctor/nurse" know in any way if you had problems getting or paying for medications you need?; D13- Does your "doctor/nurse" know about all the medications you are taking?; D14- Would you change the "service/doctor/nurse" to another health service if it were very easy to do?

Table 3 presents the stratified longitudinality score by population size, MHDI and FHS coverage.

In relation to the population size, PHC users of municipalities with up to 100,000 inhabitants. evaluated the longitudinality with high scores. The municipalities with population size ranging from 30,001 to 100,000 inhabitants presented the highest score (7.6 ± 1.8), with a significant difference (p≤0.001). However, PHC users of municipalities with more than 100,000 inhabitants (5.8 ± 2.2) evaluated the longitudinality with a significant difference in relation to the municipalities with smaller population sizes (p≤0.001) (Table 3). Regarding the MHDI, the longitudinality score was higher in the municipalities with a lower HDI (6.9 ± 1.9), with a significant difference (p≤0.001). When evaluating the score of this attribute stratified by FHS coverage, it was observed that longitudinality obtained a

high score only in municipalities with coverage of 65% or more of the population (7.0 ± 1.9), with a significant difference (p≤0.001) (Table 3).

Table 3. Longitudinal score of PHC according to population size, MHDI and FHS coverage in the municipalities of the 4th Regional Health Coordination (n=1,067)

	n	Longitudinality score Mean (SD)	Groups (p value)#		
			municipal size*		
municipal size*			II	III	IV
I. up to 10,000	181	6.8 (1.9)[a]	0.506	<0.001	<0.001
II. 10,001 to 30,000	265	6.7 (2.0)[a]	-	<0.001	<0.001
III. 30,001 to 100,000	99	7.6 (1.8)[b]	-	-	<0.001
IV. 100,001 or more	522	5.8 (2.2)[c]	-	-	-
		p≤0.001			
MHDI**					
I. 0.631 to 0.766	545	6.9 (1.9)			
II. 0.767 to 0.784	522	5.8 (2.1)			
		p≤0.001			
			FHS coverage*		
FHS coverage*			II	III	-
I. Up to 29.9%	557	5.9 (2.1)[a]	0.197	<0.001	-
II. 30.0 to 64.9%	70	6.2 (2.2)[a]	-	0.003	-
III. 65% or more	440	7,0 (1.9)[b]	-	-	-
		p≤0.001			
Total	1,067	6.4 (2.1)			

*Kruskal-Wallis test and Dunn test (a, b, c) - Statistically significant difference (p<0.05); **Mann-Whitney U test; Statistically significant difference (p<0.05)

Discussion

The mean value of the level of affiliation conferred by the PHC user was high in the health region studied, reporting that it prioritizes using the services of the first level of care. One of the essential elements in the composition of longitudinality is the existence of a regular source of attention[1], which presupposes recognition of PHC as a usual reference to meet most health needs.[2]

Recognizing a referral service and a regular source of care tends to favor the construction of longitudinality, as evidenced in a study carried out with caregivers/relatives of children and adolescents with HIV in Santa Maria City (Rio Grande do Sul State - RS).[18] Even though, longitudinality obtained a low score as assessed by PHC users. This attribute is considered unsatisfactory, suggesting weaknesses in the interpersonal relationship, bonding and trust between professionals and users. These aspects are important because they value the expanded conception of the health/disease process, built through dialogue and interaction among subjects.

The finding converges with Brazilian studies that used the PCATool-Brazil evaluation instrument in its different versions.[3,19,20] A study carried out in the city of Rio de Janeiro with adult and children users of two health care models obtained low scores in both samples.[3] A survey carried out in a municipality of Santa Catarina State, with PHC professionals, had a low score for longitudinality.[19] Similar results were found in a study carried out with relatives responsible for children attending a public service in the state of Paraná.[20]

The absence or low longitudinal linkage can have negative consequences to the population's health, as demonstrated in a longitudinal study carried out in Amsterdam, the Netherlands, where users of primary care services aged 60 and older with shorter continuity of care presented a higher risk of mortality.[21] In this study, the term continuity of care was defined as the length of the ongoing therapeutic relationship between the individuals and the service/professionals.[21]

Regarding the evaluation of items that compose the concept of longitudinality, the process of communication among users and health professionals that they knew best was considered fragile. This result may be related to accessibility problems in PHC, considered a limitation for care over time.[22] Efficient and accessible communication is an essential factor in establishing the longitudinal link.[23] Professionals must be open to dialogue, listen, identify needs and guide users, strengthening the bond and their trust in the service. In addition, with the possibility of expanding the Primary Health Care team (*equipe de Atenção Básica* - eAB), according to the recently revised National Primary Health Care Policy (*Política Nacional de Atenção Básica* - PNAB)[5], the lower number of professionals in the teams, as well as flexibility in the hiring schedules of some categories, may imply in less time available for listening and recognizing the users' living conditions.

For most of the interviewees, the health professional does not know them as a person, but only as someone with a health problem, thus proving that the traditional care model aimed at the disease is still

present in PHC services. These health care models should be person-oriented rather than disease-oriented, providing for the individual's follow-up as a whole, addressing prevention, promotion, health recovery[2,3], as well as damage reduction. It is worth mentioning that the PNAB[5] also provides new guidelines on the management of PHC resources recognizing other forms/models of PHC, which may meet the demands required to guarantee the longitudinality of care.

Unsatisfactory results were observed regarding the health professional's knowledge of who lives with users, their most important problems and their occupation. Recognizing the social and familiar context of users enables professionals to take actions befitting their reality and offer greater resolution of services.[22,24] Understanding users in their singularity and perspectives, regarding care, allows for the construction of affective territories, beyond its formal and institutional character, favoring the bond, considered an inherent demand of PHC actions.[25] Less than half of the participants stated that the practitioner would be able to help if they had problems obtaining medicines, which shows these professionals are not prepared to meet the population's needs. The service must be aware of the socioeconomic conditions of users and their possibility of access to the prescribed drugs.[23]

Most of the interviewees affirm that they would change their professional or service if this was possible, proving dissatisfaction with the care process in PHC. Similar results were found in a study carried out with adult users of PHC in Alfenas City (Minas Gerais State - MG)[26] and another study with families responsible for children served by public health services in Colombo City (Paraná State - PR).[20] One study showed that the link between health services and professional performance is the main factor valued by users and generates satisfaction.[24]

The analysis of the results demonstrates that users acknowledge fragilities in the PHC process, which is considered as a regular source of care. Gaps related to service organization, workload, lack of personnel and knowledge[27], as well as the turnover of professionals and instability in labor ties can negatively influence the link between professionals and users. Longitudinality will be achieved in all its potential when it becomes a management priority, insofar as it involves an adequate supply of services[1] with increased access and accessibility[22,28], mechanisms to maintain professionals in the community[1,28] and continuing education[28], besides the presence of professionals who are sensitive and attentive to the health needs of the population through a comprehensive care model[22,28]. This also points out the importance of interprofessional and problematizing education, during and after the training of health professionals, to change the formative centrality in the disease.

When stratifying the PHC longitudinality score by population size, larger municipalities had the worst results. Often, large municipalities concentrate smaller FHS coverage,[6,17] which may be one of the reasons for this result, considering that studies have found better results for longitudinality in the FHS in relation to the other care models[7,16,29]. This study reiterates that large municipalities have difficulty in financing and expanding the FHS, given that the financial resource provided to the municipality is linked to the coverage rate[30].

Longitudinality was evaluated with low scores in municipalities with higher HDI, which may be related to population size, considering that large municipalities of the region studied are those with the highest HDI[13], but the lowest FHS coverage. The presence of a satisfactory score for the longitudinality among the municipalities with greater FHS coverage reinforces the role of this model as provider and reorganizer of PHC[8]. Increasing FHS coverage is one of the challenges to consolidate PHC, and the expansion of PHC can lead to satisfactory results in terms of improving health indicators, especially among the most vulnerable equity in health[8,31].

The new PNAB[5] recognized other models of primary care organization other than the FHS model. Nevertheless, the FHS still remains a priority to expand and consolidate PHC in Brazil. The expectation is that the revisions by PNAB can converge towards the realization of an accessible and resolutive PHC, strengthening the SUS in its entirety. It should be emphasized that the implementation of the PNAB will not depend exclusively

on its text (revised in 2017), but on the untangling of corporate, political and economic interests, depending substantially on the participation and role of society in the struggle for the right to health care in Brazil.[32]

Given that the nurse practitioner is to play a primary role in coordinating PHC services, and thus having co-responsibilities for the effective implementation of the current PNAB, this study reinforces the importance of Nursing to provide longitudinality, developing more accurate and effective care plans, which seek to provide an improvement in quality of health care.[22] The absence of longitudinal care can make it difficult to solve problems and generate user dissatisfaction with the primary level of health. In this context, interdisciplinary assistance enhances shared care, discussions of clinical cases, favoring the construction of therapeutic projects, the search for intersectoral actions, with a focus on health promotion.

Conclusion

This study identified that PHC users of the 4th CRS/RS consider the service as a regular source of care. However, longitudinality obtained a score below the desired one. The evaluation revealed weaknesses in communication between professionals and users, the recognition of individuals in their entirety, considering their family/social context, and the preparation of professionals to assist users. These results indicate, on time, aspects that need to be advanced to reach longitudinal care. It should be highlighted that better results were found for longitudinality in municipalities with a lower HDI, in populations with under 100,000 inhabitants and with a higher FHS coverage, suggesting the need to expand the coverage of this model to reach this attribute and improve the quality of PHC. Research shows that the assessment of the longitudinality of care in PHC must be analyzed from the perspective of users and by the demographic and social aspects of the territories in which the health services are working/inserted. Moreover, issues that generate/encourage the high turnover of health professionals, such as the precariousness of work - for different reasons - should be considered, since the discontinuous work of health professionals interferes in relationships and links with PHC users.

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Collaborations

Kessler M collaborated in the conception and designing of research, its execution, collection, analysis and interpretation of data, essay writing, critical review of intellectual content and final approval of the version to be published. Lima SBS, Weiller TH and Lopes LFD contributed to the conception and designing of the study, analysis and interpretation of data, critical review of intellectual content and final approval of the version to be published. Ferraz L, Eberhardt TD, Soares RSA and Trindade LL participated in data interpretation, article writing, critical review of intellectual content and final approval of the article to be published.

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