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Longitudinality and community orientation in the context of indigenous health

Longitudinalidade e orientação comunitária na organização da Atenção Primária à Saúde em contexto indígena

Longitudinalidad y orientación comunitaria en el contexto de la salud indígena

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ABSTRACT

Objectives: to analyze, from healthcare professionals' perspectives, the longitudinality and community orientation in Primary Health Care, offered both in the Special Indigenous Health District and in the primary network that assists non-indigenous population in municipal health services in Upper Rio Negro region. **Methods**: a cross-sectional study with 116 professionals, 87 (75%) of indigenous health, 29 (25%) of municipal services. Primary Care Assessment Tool, professional version, used by Upper Rio Negro for Social Sciences region. For association of variables, chi-square test and Kruskal-Wallis were used. **Results**: longitudinality obtained an unsatisfactory score (6.4 and 6.5), as well as community orientation (6.1 and 5.6) for both services. Weaknesses refer to professional turnover, little knowledge about users' living conditions, precarious employment relationship. In indigenous health, satisfaction was higher when compared to municipal services. **Conclusions:** it is necessary to improve work management in health services, seeking to guarantee the quality of performance of professionals.
Descriptors: Health Services Research; Health Services Indigenous; Primary Health Care; Community Health Nursing; Continuity of Patient Care.

RESUMO

Objetivos: analisar, na perspectiva dos profissionais de saúde, a longitudinalidade e orientação comunitária na Atenção Primária à Saúde, ofertada tanto no Distrito Sanitário Especial Indígena quanto na rede básica que atende população não indígena nos serviços municipais de saúde na região do Alto Rio Negro. **Métodos**: estudo transversal, com 116 profissionais, 87 (75%) da saúde indígena, 29 (25%) dos serviços municipais. Utilizado o *Primary Care Assessment Tool*, versão profissionais, analisado pela região do Alto Rio Negro *for Social Sciences*. Para associação de variáveis, o teste qui-quadrado e Kruskal-Wallis. **Resultados**: longitudinalidade obteve escore insatisfatório (6,4 e 6,5), assim como orientação comunitária (6,1 e 5,6) para ambos serviços. As fragilidades referem-se à rotatividade de profissionais, pouco conhecimento sobre condições de vida dos usuários, vínculo trabalhista precário. Na saúde indígena, satisfação foi maior quando comparados aos serviços municipais. **Conclusões:** é necessário aprimorar o gerenciamento do trabalho nos serviços de saúde, buscando garantir qualidade de atuação dos profissionais.
Descritores: Avaliação em Saúde; Saúde de Populações Indígenas; Atenção Primária à Saúde; Enfermagem em Saúde Comunitária; Continuidade da Assistência ao Paciente.

RESUMEN

Objetivos: analizar, desde la perspectiva de los profesionales de la salud, la longitudinalidad y orientación comunitaria en la Atención Primaria de Salud, que se ofrece tanto en el Distrito Especial de Salud Indígena como en la red básica que atiende a la población no indígena en los servicios municipales de salud de la región del Alto Rio Negro. **Métodos:** estudio transversal con 116 profesionales, 87 (75%) de salud indígena, 29 (25%) de servicios municipales. Utilizamos el *Primary Care Assessment Tool*, versión profesional, analizada por la región Alto Rio Negro para Ciencias Sociales. Para asociación de variables, prueba de chi-cuadrado y Kruskal-Wallis. **Resultados:** la longitudinalidad obtuvo una puntuación insatisfactoria (6,4 y 6,5), así como la orientación comunitaria (6,1 y 5,6) para ambos servicios. Las debilidades se refieren a la rotación de profesionales, escaso conocimiento sobre las condiciones de vida de los usuarios, precaria relación laboral. En salud indígena, la satisfacción fue mayor en comparación con los servicios municipales. **Conclusiones:** es necesario mejorar la gestión del trabajo en los servicios de salud, buscando garantizar la calidad del desempeño de los profesionales.
Descriptores: Evaluación en Salud; Salud de Poblaciones Indígenas; Atención Primaria de Salud; Enfermería en Salud Comunitaria; Continuidad de la Atención al Paciente.

INTRODUCTION

In Brazil, the Primary Health Care (PHC) network adopts PHC guiding principles, both essential and derivative attributes under the terms established by Bárbara Starfield[1], in addition to the bond and responsibility of teams for a given territory and the population that there lives. Similarly, the indigenous health care subsystem, established by Law 9,836/99, has a health care network for these minorities managed by the Special Office of Indigenous Health (SESAI - *Secretaria Especial de Saúde Indígena*) of the Ministry of Health, which, through Special Indigenous Health Districts (DSEI - *Distritos Sanitários Especiais Indígenas*), offering PHC shares in indigenous lands[2].

The existence of an indigenous health subsystem expresses the recognition, by the legislator, of the need to offer an alternative capable of promoting extension of coverage and providing specific attention to health needs shaped by linguistic and cultural singularities, in addition to geographical and access barriers faced by such culturally differentiated groups[3]. However, eventual singularities in DSEI' performance do not nullify the fact that they offer PHC actions, allowing us to assume that the guiding principles and attributes of the PHC assistance model remain in force there.

On the other hand, the challenges to the provision of PHC in indigenous lands have similarities with those faced by municipal health systems in remote and difficult to access areas, showing a potentially enriching dialogue between both realities. However, when starting the research, in the literature review on the subject, no studies were found that compared the two realities, making the approach even more relevant.

In social research, the comparison between differences and similarities faces the challenge of properly selecting the elements to be compared, because, unlike what happens in experimental methods, there is no way to control the variables involved in the comparison[4].

The research that gave rise to this article carried out an analysis of essential attributes (first contact access, longitudinality, integrality, and coordination of care) and derivatives (family centered care, community orientation and cultural competence)[1]. PHC attributes lend themselves to dimensioning the resoluteness and quality in service organization, based on the assumption that the greater proportion of their presence, in the daily routine of the basic network, is equivalent to an increase in the positive impact on the health of the population assisted. Such attributes have also been used in the country through PCATool-Brasil, as performance indicators in the assessment of the PHC network of SUS (*Sistema Único de Saúde* – Brazilian Unified Health System)[5], which increases the reliability in its use.

For this article, analysis of an essential attribute (longitudinality) and a derivative (community orientation) was prioritized. The first is seen by Starfield[1] as a central and exclusive characteristic of PHC, as it provides, over time, the monitoring of episodes of illness and the provision of preventive care to families accompanied by professionals from PHC teams.

The good performance of the logitudinality attribute is also linked to the guarantee of continuity of care, with positive repercussions on the teams' performance, which justifies its use for PHC assessment purposes. Community orientation is also considered in the qualification of health actions in PHC, as it has relevance based on the professional's knowledge about the users' need in their social context through epidemiological, social, cultural data, in addition to the experience in the community to favor identifying existing healthcare problems in the community, assessment of services and readjustment of these to the population's health and social needs, being also an attribute considered in the qualification of the actions of PHC services[1].

Understanding the characteristics of health in the community and the resources available favors a broader way of assessing needs than just in interactions with patients or their families[1].

The two attributes were selected because they were more sensitive to the comparative process, since the previous scrutiny of the data showed that, of a wide set of attributes, longitudinality and community orientation were those implemented with greater constancy and regularity by healthcare professional teams, both from DSEI-ARN and from the investigated municipal health systems, lending themselves better to the exercise of comparability. Despite the local character of the analysis developed here, it has the potential to contribute to the improvement of health care provision for rural, border and other remote and difficult-to-reach locations, including non-indigenous populations.

OBJECTIVES

To analyze, from healthcare professionals' perspectives, longitudinality and community orientation in Primary Health Care, offered both in the Special Indigenous Health District and in the primary network, which assists non-indigenous populations in municipal health systems in the Upper *Rio Negro* region.

METHODS

Ethical aspects

In accordance with Resolution 466 of 2012 of the Brazilian National Health Council (*Conselho Nacional de Saúde*), which regulates the ethical aspects of research involving human beings, the study was submitted to and approved by the Research Ethics Committee of *Universidade de São Paulo* School of Nursing.

Study design, period and location

This is a cross-sectional quantitative study. The instrument selected to guide the methodology was the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE). The study was carried out in the Upper *Rio Negro* Indigenous Special Health District (DSEI-ARN) and in PHC services of the municipalities of São Gabriel da Cachoeira (SGC), Santa Isabel do Rio Negro (SIRN) and Barcelos in Amazonas State, from June to August 2015. The municipal health services studied were selected due to the interfaces they maintain with DSEI-ARN. DSEI-ARN is distributed among these three municipal territories, maintaining important operational relations with such offices. They receive referral patients from indigenous lands for health care that are not offered by DSEI-ARN.

Altogether, the three municipalities, which are in the district territory, form an extensive region (295,917.10 km^2), known as Upper/Middle *Rio Negro*, representing 35% of the total area of Amazonas[6]. In this area, there is a population of approximately 96,616 people, 75% of them living in rural areas calling themselves indigenous, linked to one of the 25 (twenty-five) ethnic groups demarcated by one of the four linguistic groups (Eastern Tukano, Aruak, Maku, and Yanomami)[7] distributed there. Municipalities have low social indices, with AHDI (Mean Human Development Index) ranging from 0.47 in SIRN, 0.50 in Barcelos and 0.62 in SGC[6].

Population; inclusion and exclusion criteria

The eligible population corresponded to 131 professionals (physicians and nurses), who were selected based on the registration of the Brazilian National Health Establishment Register (CNES - *Cadastro Nacional de Estabelecimento de Saúde*) and confirmed with the health offices' local managers. After confirming data, prior contact was made to schedule the start of data collection. Of the total of 131 professionals, 91 were linked to DSEI-ARN, which assists the indigenous population in the village. The rest of the study population (40 professionals) was linked to the Health Offices of the three municipalities, assisting the population that lives in municipal headquarters and in rural areas not demarcated, regardless of whether they declare themselves as indigenous.

During the period of application of the research, 5 professionals were away for health treatment, 5 on vacation, and 5 refused to participate, resulting 116 professionals who participated in the study. Professionals were chosen because they are considered primary care providers of higher education who make up a minimum team of Family Health Strategy (FHS).

This study included nurses and physicians who had worked for more than 6 months at DSEI-ARN and/or the PHC of the three municipalities, having an employment relationship with the municipal health offices and/or with SESAI/DSEI-ARN. Professionals who were on sick leave and/or vacation were excluded.

Study protocol

The Primary Care Assessment questionnaire (PCATool) - Brazil, healthcare professional version, was used, then validated[5]. The longitudinality and community orientation components (dependent variables) and the degree of orientation for PHC, considered structural, were used for this study, used to assess the attributes' reach.

The responses followed a Likert-type scale, with a score from 1 to 4, "Certainly yes" (value = 4); "Probably yes" (value = 3); "Probably not" (value = 2); "Certainly not" (value = 1). When the sum of the answer "I don't know/don't remember" (value = 9) reached 50% or more of the total items of the attributes, the questionnaire was excluded; otherwise, these responses were considered "Probably not"[5]. In the case of this study, there was no loss of questionnaire.

All scores were calculated by arithmetic mean of items' response values that make up each attribute or its component[5]. The mean score for the attributes longitudinality (composed of 13 variables) and community orientation (composed of 6 variables) were calculated by adding the value of the variables, divided by the number of variables for each component, as established in the PCATool-Brazil manual[5]. So, we have: mean score A = (A1 + A2 + A3 + A4 + A5 + A6 + A7 + A8 + A9 + A10 + A11 + A12 + A13)/13 and mean score B = (B1 + B2 + B3 + B4 + B5 + B6)/6.

Then, these scores obtained for each component were transformed into a scale from 0 to 10, called adjusted score, following the formula:

Adjusted score = (Score obtained - 1) x 10/3

To assess the degree of PHC orientation, score values ≥ 6.6 were considered satisfactory, and, as unsatisfactory, <6.6.

Analysis of results and statistics

The collected data were inserted into a single spreadsheet using Microsoft Excel software®. Statistical analysis was performed using the Statistical Package for Social Sciences (SPSS®), version 21.0 for Windows and in statistical package R.

For statistical analysis, the alternatives "Certainly yes" and "Probably yes" were aggregated, represented in the tables by 1*, the same occurring for the alternatives "Certainly not" and "Probably no", which, in the tables, they are represented by 2*.

Assessment of items that make up the two attributes of the PHC object of this article was made by crossing variables of PCATool and professionals' institutions of origin (DSEI-ARN and SEMSA). The association between these variables was assessed using chi-square test or maximum likelihood test, when appropriate. To compare the scores between professionals' institutions of origin, Kruskal-Wallis test was used, since data did not have a normal distribution. For all statistical analyzes, a significance level of 5% was considered.

RESULTS

Of the universe of 131 eligible professionals, 116 (88.5%) answered the questionnaire, 87 from DSEIARN and 29 from SEMSA. Of these, 84 (72%) were nurses and 32 (28%) were physicians, with a mean age of 35 years, prevalence of females (59.7%), mixed-race (42.2%), single (44%). Concerning contracting agent, 60.3% were hired by Non-Governmental Organizations (NGOs) and 39.7% by Direct Administration. Training time was 5 years, with 3 years of experience in PHC in the Upper *Rio Negro* region.

Table 1 shows the variables that make up the longitudinality attribute. There was a statistically significant difference between variables A1 (p = 0.001), A4 (p = 0.001), A7 (p = 0.007) and A11 (p = 0.001). Still in relation to the data presented in Table 1, it is relevant to highlight that, in variable B6, a statistically significant difference was observed (p≤0.001). The degree of orientation for PHC had a low score (6.1; 5.6) and a statistically significant difference (p≤0.004).

For the group of institutions studied, the consolidated of the answers given by professionals shows an unsatisfactory score for the degree of orientation towards longitudinality (6.4 and 6.5 for DSEI-ARN and SEMSA, respectively). Values below the cutoff point (≥ 6.6) recommended in PCATool were totalized for an adequate orientation of this attribute in PHC activities, even though the municipal system has achieved a performance closer to that recommended.

Table 2 systematizes the data related to the Community Orientation component and the degree of its orientation to PHC.

In Table 2, only variable B6 showed a statistically significant difference (p≤0.001) in the comparison between the two types of service providers. The degree of orientation for PHC also had a low score (6.1; 5.6); for both, it is a statistically significant difference (p≤0.004).

It should be noted, however, that absence of a statistically significant difference does not prevent an appreciation of the variables in which such difference was absent, as it is a small universe, therefore subject to fluctuation in analyzes.

DISCUSSION

Using a validated instrument to assess health services, based on the attributes of PHC, as is the case of PCATool, is important, as it allows assessing how healthcare professionals perceive the services they provide to the populations they assist, also contributing to improve accessibility, quality and effectiveness of the characteristic attributes of PHC[8-9].

When comparing the responses of the respondents of DSEI-ARN and the Municipal Health Offices to the longitudinality attribute and with regard to the stability of care by the same professional, the

Table 1 - Comparison of longitudinality scores and degree of orientation for Primary Health Care between the Special Indigenous Health District and the Municipal Health Office according to healthcare professionals from Upper *Rio Negro*, São Gabriel da Cachoeira, Amazonas, Brazil

Variables	INSTITUTION				*p* value
	Indigenous District n= 87		Health Office n= 29		
	1* (n=%)	2* (n=%)	1* (n=%)	2* (n=%)	
A1- In their health service, are patients always assisted by the same physician/nurse?	25(28.7)	62(71.3)	19(65.5)	10(34.5)	0.001
A2 - Can you understand the questions your patients ask you?**	87(100)	-	29(100)	-	-
A3 – Do your patients understand what you say or ask them?	85(97.7)	2(2.3)	29(100)	-	0.281
A4 - If patients have a problem, can they call and speak to the physician or nurse who knows them best?	49(56.3)	38(43.7)	5(17.2)	24(82.8)	0.001
A5 - Do you give patients enough time to talk about their concerns or problems?	83(95.4)	4(4.60)	29(100)	-	0.571
A6 - Do you think your patients are comfortable telling you their concerns or problems?	76(87.4)	11(12.6)	28(96.6)	1(3.4)	0.119
A7 - Do you know your patients more as people than just someone with a healthcare problem?	80(92.0)	7(8.0)	27(93.1)	2(6.90)	0.839
A8 – Do you know who lives with each of your patients?	51(58.6)	36(41.4)	8(27.6)	21(72.4)	0.007
A9 – Do you understand which problems are most important for the patients you care for?	71(81.6)	16(18.4)	26(89.7)	3(10.3)	0.395
A10 – Do you know the complete health history of each patient?	22(25.3)	65(74.7)	9(31)	20(69)	0.716
A11 – Do you know the job of each patient?	52(59.8)	35(40.2)	5(17.2)	24(82.8)	0.001
A12 – Would you be aware if your patients did not get the prescribed medications or had difficulty paying for them?	74(85.1)	13(14.9)	27(93.1)	2(6.9)	0.236
A13 – Do you know all the medications your patients are taking?	41(47.1)	46(52.9)	15(51.7)	14(48.3)	0.6679
Degree of PHC orientation					
Longitudinality (consolidated for the attribute)	6.4		6.5		0.828

Note: PHC - Primary Health Care; the answer "Certainly yes/probably yes" is represented in the table with the number 1 and "Certainly not/probably not" with the number 2 *; **it was not possible to apply a statistical test because in both institutions professionals indicated a single alternative.*

Table 2 - Comparison of Community Orientation scores and the degree of orientation for Primary Health Care between the Special Indigenous Health District and the Municipal Health Office according to healthcare professionals from Upper *Rio Negro*, São Gabriel da Cachoeira, Amazonas, Brazil

Variables	INSTITUTION				*p* value
	Indigenous District n=87		Health Office n=29		
	1* (n=%)	2* (n=%)	1* (n=%)	2* (n=%)	
B1 – Do you or someone in your health service make home visits?	86(98.9)	1(1.1)	29(100)	-	0.447
B2 – Do you believe that your health service has adequate knowledge of the healthcare problems of the community it assists?	63(72.4)	24(27.6)	21(72.4)	8(27.6)	0.188
B3 – Does your health service listen to opinions and ideas from the community on how to improve health services?	74(85.1)	13(14.9)	22(75.9)	7(24.1)	0.395
B4 - Do you do research with patients to see if the services meet people's needs?	13(14.9)	77(85.1)	4(13.8)	25(86.2)	0.878
B5 - Do you do research in the community to identify healthcare problems that it should know about?	20(23)	67(77)	7(21.1)	22(75.9)	0.899
B6 – Are there users in the Local Health Council?	85(97.7)	2(2.3)	11(37.9)	18(62.1)	0.001
Degree of PHC orientation					
Community Orientation (attribute consolidated)	6.1		5.6		0.004

Note: PHC - Primary Health Care.

71.3% of negative responses from those working in DSEI-ARN, in counterpoint to the 34.5% of negative responses from those linked to municipal health systems, suggest a high workforce turnover in DSEI. Although the data from the research do not allow us to conclude conclusively that turnover is the cause of the problem, it is a known difficulty and pointed out in publications[2-10] that dealt with service organization in the indigenous health subsystem, pointing out DSEI's difficulty in ensuring the maintenance of qualified professionals to provide health care in the villages.

For other variables of the same attribute, there is limited knowledge about the living and working conditions of patients assisted, both for those working at DSEI-ARN (58.6% know their patients' co-residents and 59.8% the work performed by them) and by non-indigenous primary health care professionals, whose percentages of favorable responses are even lower (27.6% know their patients' relatives and 17.2% the work performed by them). In other words, although the turnover in caring for indigenous people may be high, the work in the villages seems to favor a more personalized service, in contrast to the anonymity of patients assisted at the municipal headquarters, suggesting a lack of bonds and humanization in PHC teams' work that there act.

The limitation of the bond established with patients is reaffirmed by the answers given to variable A4, in which it was asked whether, when facing problems, patients can call healthcare professionals. The 17.2% of affirmative responses given by non-indigenous primary care professionals shows the fragile link provided by services in meeting unforeseen situations faced by users. The 56.3% of affirmative answers given by DSEI-ARN professionals demand additional clarification on working conditions at DSEI-ARN. Although it is low, this percentage of affirmative responses shows an effort to establish a professional-patient relationship capable of instituting some welcoming to the healthcare problems faced by indigenous users, even if geographically distant.

Publications describing conditions of access, organization and provision of health services in indigenous lands are limited. However, those available[2-10] show that geographical characteristics, such as great distances and natural obstacles, hinder the regular offer of care in indigenous villages, either in the manner recommended by FHS or by the Brazilian National Indigenous Health Policy (PNASPI - *Política Nacional de Atenção à Saúde dos Povos Indígenas*).

Such publications[2-10] also show infrastructure limitations, such as lack of electricity and of means of communication such as telephone network, making it impossible to provide health actions and services on a daily basis. In this context, PHC care is done through periodic trips by the teams, who need to travel in painful conditions, from the municipal headquarters to the villages, in order to provide care. Communication takes place mainly through radio, installed in a restricted number of locations. In this context, it must be inferred that the answer given by the interviewees who work at DSEI-ARN to the question contained in variable A4 (if patients can call healthcare professionals when facing problems) refers, in fact, to the search for contact through radio, connoting an important effort to meet such needs through a precarious means of communication as radio is.

The working conditions described for DSEI-ARN must be understood as structural barriers to access services both with regard to the physical network's structuring and health action management, organization and provision. Such limitations increase, among other consequences, the difficulty of establishing workforce and obtaining and exercising the cultural competence[11] necessary to provide culturally appropriate care. Moreover, they limit the longitudinality of care and compliance with PNASPI provisions[7].

The description of the circumstances that shape the care provided by DSEI-ARN professionals makes it understandable - and to some extent justifiable - the reach of low percentages of affirmative responses to the variables that make up the longitudinality attribute of the care offered to the indigenous, highlighting elements of difficulty for DSEI-ARN to become a regular and daily source of care.

On the other hand, the professionals of Municipal Health Offices work in the urban network of the small municipal headquarters in the usual way of FHS, through a regime of 8 hours of work and daily operation of the units. Although they enjoy more favorable working conditions, the scores obtained by this group are low due to the high number of negative responses to the questions set out in variables A4, A8, A10, A11 and A13 (Table 2), which assess professionals' knowledge on health history, lifestyle and work of patients as part of the longitudinality attribute.

For this group of respondents, professional turnover should not be overlooked, because, although they operate in more favorable conditions than their counterpart in DSEI-ARN, it is an event known in the national scenario for the primary care network[12] and, in particular, for small municipalities, where the PHC network also faces difficulties to act as a regular source of care for the population.

The unsatisfactory score of the consolidated of the answers given by professionals of both institutions for the longitudinality attribute (6.4 and 6.5 for DSEI-ARN and SEMSA, respectively) does not differ essentially from the results obtained in other areas of the country, including in regions richer and with better HDI, such as southern and southeastern Brazil[9,13]. These are results that express all barriers faced by SUS to promote equity, quality, effectiveness of the primary care network[14].

For community orientation, the second attribute evaluated, the results obtained are somewhat paradoxical. For both services, more than 70% of respondents believe they have adequate knowledge of the community's health needs (variable B2, Table 2). However, this belief is not supported by consistent assessments, such as user satisfaction surveys (variable B4 in Table 2, with 14.9% of favorable responses for DSEI-ARN and 13.8% for professionals serving non-indigenous populations) or investigations into the main healthcare problems in the community (variable B5, Table 2 = 23% and 21.1%, respectively).

The results obtained for Upper *Rio Negro* in this attribute are difficult to compare with the scientific literature, due to the selection by some authors, of variables other than those recommended in PCATool-Brasil and the adoption of different cutoff points to classify the scores[15].

The most feasible results of comparison were found in a survey conducted in Maranhão[16], which used variables compatible with those adopted in our research in Upper *Rio Negro*. It should be noted, however, that the research conducted by Alencar et al[16] in Maranhão was not oriented towards the indigenous

population, as it covered a wider range of interviewees (users, professionals and managers), using another scale to group the answers obtained. Even so, isolating only the results obtained from professionals working in the basic network, it was possible to observe that, in Maranhão, only 15% of interviewees believed they knew the community's main healthcare problems. Among the same respondents, only 7.5% (against 14.9% of DSEI-ARN and 13.8% of workers in health offices in Upper *Rio Negro*) conducted surveys to assess user satisfaction. For the question, we sought to identify the population's main problems through surveys. Only 3.7% of professionals from Maranhão's primary network declared doing so, against 23% of respondents from DSEI-ARN and 21.1% of those working with non-indigenous populations in Upper *Rio Negro*.

The expressive recognition by DSEI-ARN professionals regarding the participation of indigenous users in health councils (97.7%) contrasts with the 37.9% of positive responses given by the interviewees who work in the municipal health systems covered by the research, as well as the 59.3% recognition for the same item, obtained in the research by Alencar et al[16] carried out with PHC professionals in Maranhão.

In the case of Rome, it can be inferred that such results are mainly due to the strong role of indigenous associations in health policy[17]. This fact makes their participation in health councils[18] and in other spaces for indigenous policy management, whether at the local or national level, a daily event impossible to be ignored by professionals working at DSEI-ARN. This is a unique scenario that is not repeated for non-indigenous people from adjacent municipalities, contributing to explain the high percentage of negative responses from interviewees who work with non-indigenous populations.

For the set of the community orientation attribute, the consolidated score is low, but that achieved by professionals working in DSEI-ARN (6.1) is closer to the cutoff point of 6.6 stipulated in the research as a satisfactory score, in counterpoint to the result of 5.6, achieved by respondents from the municipal health offices. An analysis undertaken by Gonçalves and Bógus[19] supports the findings of this study, as it reinforces the idea that the participation of social action and the performance of health councils are still only incipient in the routines of family health teams.

Study limitations

The main limitation of the study is due to the scarcity of research that favors the comparison of the findings presented here with those found in other realities.

Contributions to nursing, health, and public policies

This study contributes to the critical reflection on the need to improve the work process of professionals who work in remote and difficult to access regions, also pointing out findings that not only express the unique Amazonian sociodiversity, but also identify innovative situations capable of revitalizing the PHC profile in the region. It also has the potential to contribute to the necessary reorganization of PHC health services and actions, in order to make them more permeable to local populations' needs. Thus, it can be a data source for future studies that seek evidence that the guarantee of equitable and comprehensive access to PHC network care in the Upper *Rio Negro* region continues to be processed and improved.

CONCLUSIONS

This study demonstrates the assessment method's contribution to the social reality knowledge and contextual information provision that shape healthcare professionals' experiences in their daily work, enabling them to outline strategies for the improvement of their practices in a given health territory. It reaffirms the relevance of using validated instruments, such as PCATool, in to assess the central characteristics of PHC in SUS.

As a whole, the data reveal that longitudinality and community orientation appropriation by healthcare teams that offer care to indigenous and non-indigenous populations of Upper *Rio Negro* still needs improvement. Even so, these findings are not contradictory with those found in other regions of the country, demonstrating limitations faced by the Primary Care National Policy (*Política Nacional de Atenção Básica*) in providing coverage extension to remote places in the national territory.

However, analysis of the scores obtained by the interviewees who work in indigenous health, in comparison to those who work in the health systems of the municipalities adjacent to indigenous lands, suggests that, despite facing adverse work conditions and problems common to PHC teams allocated in poor regions and with low HDI, DSEI-ARN professionals express, comparatively, greater adherence to the attributes longitudinality and community orientation, assessed in the research.

The results found cannot be considered satisfactory; however, they demonstrate the importance of mapping the societal and contextual elements that surround PHC teams' work and that can contribute to improving their performance even in adverse conditions. The research findings also highlight the need to understand the ways of life of populations that inhabit the territories assisted by healthcare teams, which have a marked influence on the healthcare profiles found there.

This premise was demonstrated, for instance, in the finding that high recognition of social control activities by teams working at DSEI-ARN is related to the leading role of ethnopolitical struggles that contribute to the politicization of teams' daily activities. On the other hand, the low recognition of community participation in social control among professionals working with non-indigenous people shows the limited political role played by non-indigenous regional populations in the municipalities studied.

Despite this, the research findings are still worrisome, since the studied attributes shape the temporal, longitudinal monitoring of health situations and injury occurrence in the population assisted. The limited appropriation by professionals of essential characteristics and derivatives of PHC indicates the need to improve work management in health units, seeking to guarantee the quality and effectiveness of their professionals.

REFERENCES

1. Starfield B, Shi L, Macincko J. Contribution of Primary care to health systems and health. Milbank Q [Internet]. 2005 [cited 2018 Apr 5];83(3):457-502. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690145/
2. Cardoso A, Santos RV, Coimbra Jr CED, Garnelo L, Chaves MBG. Políticas Públicas de Saúde para os Povos Indígenas. In: Giovanella L, Escorel S, Lobato LVC, Noronha JC, Carvalho AI, organizadores. Políticas e Sistema de Saúde no Brasil. 2. ed. Rio de Janeiro: Editora Fiocruz;2012. p. 911-32.
3. Garnelo L. O SUS e a Saúde Indígena: matrizes políticas e institucionais do Subsistema de Saúde Indígena. In: Teixeira CC, Garnelo L, (Org.). Saúde indígena em perspectiva: explorando suas matrizes históricas e ideológicas. Rio de Janeiro: Editora Fiocruz; 2014. p. 107–42.
4. Gil AC. Métodos e técnicas de pesquisa social. 6 ed. São Paulo: Editora Atlas, 2008.
5. Ministério da Saúde (BR). Manual do instrumento de avaliação da atenção primária à saúde: Primary Care Assessment Tool PCATool-Brasil [Internet]. Brasília: Ministério da Saúde; 2010 [cited 2018 Sep 22]. Available from: http://bibliotecadigital.puc-campinas.edu.br/services/e-books/manual_avaliacao_pcatool_brasil.pd
6. Instituto Brasileiro de Geografia e Estatística. Dados gerais do município. 2019: Brasil [Internet]. [cited 2019 Mar 20]. Available from: https://cidades.ibge.gov.br/
7. Ministério da Saúde (BR). Secretaria Especial de Saúde Indígena - SESAI. Distrito Sanitário Especial Indígena do Alto Rio Negro [Internet]. 2018[cited 2018 Oct 10]. Available from: http://www.saude.gov.br/saude-indigena/saneamento-e-edificacoes/dseis
8. Prates ML, Machado JC, Silva LS, Avelar PS, Prates LL, Mendonça ET, et al. Desempenho da Atenção Primária à Saúde segundo o instrumento PCATool: uma revisão sistemática. Ciênc Saúde Coletiva. 2017;22(6):1881-93. doi: 10.1590/1413-81232017226.14282016
9. Ferreira VD, Oliveira JM, Maia MAC, Santos JS, Andrade RD, Machado GAB. Avaliação dos atributos da Atenção Primária à Saúde em um Município Mineiro. Esc Anna Nery 2016;20(4). doi: 10.5935/1414-8145.20160104
10. Garnelo L, Macedo G, Brandão LC. Os povos indígenas e a construção das políticas de saúde indígena no Brasil. Brasília: Organização Pan-Americana da Saúde; 2003. 120 p.
11. McMurray A, Param R. Culture-specific care for indigenous people: a primary health care perspective. Contemp Nurse. 2008;28(1-2):165-72. doi: 10.5172/conu.673.28.1-2.165
12. Tonelli B, Leal AP, Tonelli W, Veloso DC, Gonçalves D, Tonelli S. Rotatividade de profissionais da Estratégia Saúde da Família no município de Montes Claros, Minas Gerais, Brasil. RFO [Internet]. 2018 [cited 2018 Sep 20];23(2). Available from: http://www.seer.upf.br/index.php/rfo/article/view/8314
13. Kessler M, Lima SB, Weiller TH, Lopes LP, Ferraz L, Eberhardt TD, et al. Longitudinalidade do cuidado na atenção primária: avaliação na perspectiva dos usuários. Acta Paul Enferm. 2019;32(2):186-93. doi: 10.1590/1982-0194201900026
14. Gasparini MFV, Furtado JP. Longitudinalidade e integralidade no Programa Mais Médicos: um estudo avaliativo. Saúde Debate. 2019;40(120):30-42. doi: 10.1590/0103-1104201912002
15. Paula WKAS, Samico IC, Caminha MFC, Batista Filho M, Figueirôa JN. Orientação comunitária e enfoque familiar: avaliação de usuários e profissionais da estratégia saúde da família. Cad Saúde Colet. 2017;25(2):242-8. doi: 10.1590/1414-462x201700020113
16. Alencar MN, Coimbra LC, Morais APP, Silva AAM, Pinheiro SRA, Queiroz RCS. Avaliação do enfoque familiar e orientação para a comunidade na Estratégia Saúde da Família. Ciênc Saúde Coletiva. 2014;19(2):353-64. doi: 10.1590/1413-81232014192.08522012
17. Garnelo L, Sampaio S. Bases sócio-culturais do controle social em saúde indígena: problemas e questões na região norte do Brasil. Cad Saúde Pública. 2003;19(1):311-17. doi: 10.1590/S0102-311X2003000100035
18. Baniwa A, Karipuna K. Controle social: o ponto de vista das lideranças. In: Garnelo L, Pontes AL, (Org.). Saúde Indígena: uma introdução ao tema. Brasília: Ed. MEC-SECADI, 2012, pg. 216-241. (Coleção Educação para Todos), 280 pg.
19. Gonçalves CCM, Bógus CM. Participação social, planejamento urbano e promoção da saúde em Campo Grande (MS). Trab Educ Saúde. 2017;15(2), 617-40. doi: 10.1590/1981-7746-sol00057