

# Primary Health Care attributes in the context of indigenous health

Atributos da Atenção Primária à Saúde no contexto da saúde indígena Atributos de la Atención Primaria de Salud en el contexto de la salud indígena

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#### **ABSTRACT**

**Objectives:** to assess the attributes of Primary Health Care from the perspective of health professionals, comparing services in the Special Indigenous Health District and the Municipal Health Offices. **Methods:** a cross-sectional study in the Upper Rio Negro region, State of Amazonas, with 116 professionals. The data were collected through the Primary Care Assessment Tool. Scores were categorized ( $\geq$  6.6) - strong orientation and (<6.6) - low orientation. The chi-square and maximum likelihood test for crossover analysis. The comparison between professionals the Kruskal-Wallis Test. **Results:** a higher overall score was observed in the Indigenous Health District (7.2). The same trend was observed individually in the essential and derived attributes. **Conclusions:** this work may support strategies that positively impact the management model and work processes from the perspective of strengthening the primary care offered to the population from Rio Negro.

**Descriptors:** Health Evaluation; Health of Indigenous Peoples; Primary Health Care; Community Health Nursing; Public Health Nursing.

#### **RESUMO**

**Objetivos:** avaliar os atributos da Atenção Primária à Saúde, na perspectiva dos profissionais de saúde, comparando os serviços no Distrito Sanitário Especial Indígena e nas Secretarias Municipais de Saúde. Métodos: trata-se de um estudo transversal, na região do Alto Rio Negro, Amazonas, com 116 profissionais. Os dados foram coletados por meio do *Primary Care Assessment Tool*. Fez-se a categorização dos escores ( $\geq$  6,6) - forte orientação e (< 6,6) - baixa orientação. O Teste Qui-Quadrado e de máxima verossimilhança para análise dos cruzamentos. A comparação entre os profissionais o Teste de Kruskal-Wallis. **Resultados**: foi observado escore geral maior no Distrito Sanitário Indígena (7,2). A mesma tendência foi observada individualmente nos atributos essenciais e derivados. **Conclus**ões: este trabalho poderá subsidiar estratégias que impactem positivamente no modelo de gestão e processos de trabalho na perspectiva do fortalecimento da Atenção Primária ofertada à população rionegrina.

**Descritores:** Avaliação em Saúde; Saúde de Populações Indígenas; Atenção Primária à Saúde; Enfermagem em Saúde Comunitária; Enfermagem em Saúde Pública.

#### RESUMEN

Objetivos: evaluarlos atributos de la Atención Primaria de Salud, desde la perspectiva de los profesionales de la salud, comparando servicios en el Distrito Especial de Salud Indígena y los Departamentos Municipales de Salud. **Métodos:** este es un estudio transversal en la región del Alto Rio Negro, Amazonas, con 116 profesionales. Los datos fueron recolectados a través de la *Primary Care Assessment Tool*. Las puntuaciones se clasificaron (≥ 6.6) − orientación fuerte y (<6.6) − orientación baja. La prueba de chi-cuadrado y de máxima verosimilitud para el análisis cruzado. La comparación entre profesionales de la prueba de Kruskal-Wallis. **Resultados:** se observó una puntuación general más alta en el Distrito de Salud Indígena (7,2). La misma tendencia se observó individualmente en los atributos esenciales y derivados. **Conclusiones:** este trabajo puede apoyar estrategias que impacten positivamente el modelo de gestión y los procesos de trabajo desde la perspectiva del fortalecimiento de la Atención Primaria ofrecida a la población de Río Negro.

**Descriptores:** Evaluación en Salud; Salud de Poblaciones Indígenas; Atención Primaria de Salud; Enfermería en Salud Comunitaria; Enfermería en Salud Pública.



#### **INTRODUCTION**

In the Brazilian context, Primary Health Care (PHC) has been called Basic Health Care (BHC), and has become the main gateway for users to the health system. The Family Health Strategy (FHS) is the organization model induced by the Ministry of Health (MoH), having as main object the family and its social space in the territory<sup>(1)</sup>.

As a result, establishing a bond with the population becomes one of the main attributes of the FHS, enabling commitment and continuity of care. This principle of action configures a new way of acting in health, allowing the sharing, between families and teams, of the responsibility for the health care offered there over time<sup>(2)</sup>.

The FHS is guided by the PHC attributes that Starfield<sup>(3)</sup> classifies as essential: first contact access; the longitudinality; completeness; coordination of attention and derived attributes: family orientation, community orientation and cultural competence. The international scientific literature shows several studies that show that when these attributes are present in the services, there is an improvement in the quality of care<sup>(4)</sup>.

In 1999, the indigenous health subsystem was created in Brazil, regulated by Law 9,836/99. The current management is carried out by the Special Office of Indigenous Health (SESAI - Secretaria Especial de Saúde Indígena), the MoH body responsible for managing a PHC service network in indigenous areas, articulated with other levels of SUS (Brazilian Unified Health System – Sistema Único de Saúde) care<sup>(5)</sup>.

Although PHC is recommended for the entire population, its operationalization in indigenous lands presents singularities linked to linguistic and cultural differences, in addition to the geographical and access barriers faced by the population.

In the general scope of PHC, some initiatives have been developed by the MoH for assessment and monitoring in their various aspects, on the applicability of various approaches to health assessment. The Primary Care Assessment Tool (PCATool –Primary Care Assessment Tool) has been considered by Malouin, Starfield, Sepulveda<sup>(4)</sup> to be able to assess PHC attributes as well as the performance of PHC structural and process characteristics.

Brazilian literature includes some studies that analyze the functioning of the Upper Rio Negro Indigenous Special Health District (*Distrito Sanitário Especial Indígena do Alto Rio Negro*)<sup>(6-7)</sup>. Taken together, their analyzes show that there has been progress in the extension of coverage and financing of the sector, but also irregularities, low effectiveness and poor resolution of sanitary actions carried out in the DSEI. Such studies do not present systematized or validated assessment tools to capture the reality exposed there.

Such district demands the need for constant assessment regarding the model of care offered, as well as its articulation with the municipal health systems. This leads to the need for integrated tools capable of simultaneously verifying the indigenous health subsystem and the health network services of the municipalities of the same district territory, and in what ways these assumptions of differentiated care and the primary care model develop in daily life.

The experience of one of the authors in the field of indigenous health allowed the elaboration of an initial hypothesis that the presence and extension of PHC attributes, measured by the PCA-Tool tool. They differ between the primary care services offered by the Special Indigenous Health District and the municipal health services in the Upper *Rio Negro* (*Alto Rio Negro*) region.

Therefore, the analyzes proposed here, even if they deal with local realities, have the potential to contribute to the improvement of health care provision for rural and border populations, including non-indigenous people.

It should be emphasized the relevance of the clipping proposed here, given the lack of literature that makes comparisons between the services offered in the indigenous health subsystem and in municipal health services that face similar conditions of care to their residents, whether indigenous or non-indigenous population.

In summary, we believe that this study can contribute to support the improvement and innovation of the work process in indigenous and non-indigenous areas. Thus, managers and health professionals are oriented to organize their services and offer health actions according to the needs of the population from *Rio Negro*, ensuring equitable, comprehensive, and quality access in the Upper *Rio Negro* region.

#### **OBJECTIVES**

To assess the attributes of Primary Health Care, from the perspective of health professionals, comparing services in Special Indigenous Health Districts and Municipal Health Offices.

#### **METHODS**

# **Ethical aspects**

This study was approved by the Ethics Committee of the *Universidade de São Paulo's* School of Nursing, following the guidelines of Resolution 466/12 of the Brazilian National Health Board (*Conselho Nacional de Saúde*), under Opinion 1,084,040.

## Design, setting, and period

This is a cross-sectional, exploratory and quantitative study carried out in the Upper*Rio Negro* Indigenous Special Health District (DSEI-ARN - *Distrito Sanitário Especial Indígena Alto Rio Negro*) and in the PHC services of the cities of São Gabriel da Cachoeira (SGC), *Santa Isabel do Rio Negro* (SIRN), and Barcelos, in the State of Amazonas, from June to August 2015. The choice of DSEI-ARN is related to its importance in the setting of indigenous policy of Amazonas, the fact that it has two municipalities with the largest indigenous contingent in the country<sup>(8)</sup> and the difficulties of geographical access that are characteristic of the rural Amazonian settings. The municipal health services studied were selected according to the interfaces they maintain with the DSEI-RNA. This is distributed among these three municipal territories and has important operational relationships with such departments, as they receive patients referred from indigenous lands for health care that are not offered by DSEI-ARN.

The Upper *Rio Negro* region comprises a set of three municipalities, where the studied indigenous lands are also based. It forms an extensive region (295,917.10 km²) known as the Upper/Middle *Rio Negro*, which accounts for 35% of the total area of the State of Amazonas<sup>(8)</sup>. There live a population of approximately 96,616 of these 40,233 indigenous people, with 75% of the population living in rural areas calling themselves indigenous, of 25 (twenty-five) ethnic groups in four linguistic trunks (East Tukano,

Aruak, Makue Yanomami)<sup>(9)</sup>. The region's social indexes are well below the national mean, with the mean human development index (HDI) ranging from 0.47 in *Santa Isabel do Rio Negro*, 0.62 in *São Gabriel da Cachoeira* and 0.50 in Barcelos<sup>(8)</sup>.

#### Study population; inclusion and exclusion criteria

The eligible population corresponded to the universe of 131 professionals (doctors and nurses) who worked in PHC in the Upper *Rio Negro* region. Of this total, 91 were linked to the Special Indigenous Health Office (SESAI - *Secretaria Especial de Saúde Indígena*), which serves the indigenous population living in the village, and 40 to the Health Offices of the three municipalities, which serve the population, regardless of whether or not people recognize themselves as indigenous. During the research period, 5 professionals were away for health treatment and 10 on vacation, resulting in the number of 116 professionals who participated in the study. The choice of these professionals is justified because they are considered the top-level primary care providers that make up a minimum FHS team.

The inclusion criteria were to be nurses and doctors working for more than 6 months in the DSEI and/or PHC of the three municipalities and have employment relationship with the municipal health departments and or with SESAI/DSEI. The exclusion criteria were professionals who were away from work at the time of data collection with medical certificates and/or holidays, did not accept to participate in the study, or were not included in PHC.

#### Study protocol

Data collection was performed using the Primary Care Assessment tool (PCATool - Brazil), health professionals version, already validated in Brazil in 2010<sup>(10)</sup>. This tool aims to assess the orientation to PHC, and consists of 77 items divided into 8 components, 6 of them considered essential attributes and 2 of them derived attributes. These were defined as dependent variables: access (structure and process components), longitudinality (structure and process component), coordination (structure and process components), family orientation and community orientation, allowing the construction of scores for each dimension (attribute) and its components.

As a result, responses are structured following the Likert scale, assigning scores in the range from 1 to 4 for each attribute (1 = sure, no; 2 = probably no; 3 = probably yes; and 4 = sure, yes). In order to obtain the PHC orientation score, the mean of the values of the comprehensive items of each attribute and its components was calculated.

Data were entered into the SPSS° (Statistical Package for Social Sciences), version 2.1 Program for Windows, in the double-digit system, validating and checking database consistency.

#### **Analysis of results**

The assessment of the items that make up each of the PHC attributes was made by crossing the PCATool variables and the type of institution of the professionals (DSEI-ARN and SEMSA). Pearson's chi-square test was used to analyze the intersections and, in the impossibility of using this test, we opted for the maximum likelihood test. For the comparison between the two

groups of professionals, the score grade and the Kruskal-Wallis test were considered, since the data had no normal distribution. The significance level used was 5%.

To calculate the attribute scores, the mean of the response values of the items was calculated. Then, for the assessment of items within each attribute, item responses were grouped into just two categories: "Sure, yes/probably, yes" and "Sure, no/probably, no".

For the assessment of the PHC classification, the score for each of the PHC attributes, the essential score, the derived score and the overall PHC score were obtained for each questionnaire, as described in the MoH PHC Assessment Tool Manual<sup>(10)</sup>.

To assess the degree of PHC orientation, the scores were categorized as "Strong PHC orientation" and "Low PHC orientation", considering: Values ( $\geq$  6.6) - strong PHC orientation and Values (<6, 6) - low orientation for PHC, for each of the dimensions analyzed. Then, the proportion of the degree of orientation (strong/low) between the institutions (DSEI-RNA and SEMSA) was compared).

#### **RESULTS**

Out of 131 eligible professionals, 116 (88.5%) responded, 87 from DSEI-ARN and 29 from SEMSA. Of these, 84 (72%) were nurses and 32 (28%) doctors. The mean age was 35 years between both professionals.

Regarding the contracting agent, 78.2% were hired by a Non-Governmental Organization (NGO), under CLT (CLT in Brazil governs the relationship between employers, employees and trade unions. It sets outs labor guarantees such as maternity leave and vacation) regime, and 19.5% by the direct administration, under a contract for length of service. Regarding the form of admission, only 17 (18.4%) stated to have been through public selection and the remaining 70 (80.4%) by another form of admission.

Table 1 presents the result of the classification of the attributes of the two groups assessed (DSEI-RNA and SEMSA). The comparison of these groups was made by attribute scores, the essential and derived scores showed that both groups presented strong orientation. However, the DSEI-RNA group presented higher values in both scores (7.8 and 7.2), being this difference between the values statistically significant.

In the Accessibility attribute, it was found the lowest median score among all attributes. This was observed among those of SEMSA, with a value of 2.6 below the cutoff value 6.6, indicating a low degree of PHC orientation. This value differed significantly (p <0.001) from the DSEI-RNA group of professionals who obtained a median of 7.8, which in turn indicates a strong degree of orientation for this attribute.

The longitudinality attribute was the only essential attribute with low degree of orientation for PHC in the DSEI-RNA group, while in the SEMSA group were the accessibility and longitudinality attributes. Regarding the essential attributes, it is noteworthy that the attributes coordination/integration of care and coordination/information system, despite presenting scores above the cutoff point, indicating strong degree of orientation for PHC, there was a statistical difference. The DSEI-ARN group presented the best score for the coordination/integration of care attribute and the SEMSA group presented the best score for the coordination/information system attribute.

**Table 1** - Score of Essential and Derivative attributes classified as Strong and Low PHC Overall Score, according to health professionals from DSEI-ARN and SEMSA, in Upper *Rio Negro*, Amazonas, Brazil, 2016

| PHC attributes                       | Institution     |                 |        |      |          |                |                 |        |      |          |          |
|--------------------------------------|-----------------|-----------------|--------|------|----------|----------------|-----------------|--------|------|----------|----------|
|                                      | DSEI-ARN (n=87) |                 |        |      |          | SEMSA (n=29)   |                 |        |      |          | p value  |
|                                      | Lower<br>Value  | Higher<br>Value | Median | Mean | 95% CI   | Lower<br>Value | Higher<br>Value | Median | Mean | 95% CI   | <i>p</i> |
| Essentials                           |                 |                 |        |      |          |                |                 |        |      |          |          |
| Accessibility*                       | 3.7             | 10              | 7.8    | 7.6  | [7.37.9] | 1.1            | 6.7             | 2.6    | 2.7  | [2.33.1] | 0.001    |
| Longitudinality                      | 3.6             | 9.5             | 6.4    | 6.5  | [6.26.8] | 4.4            | 8.2             | 6.6    | 6.5  | [6.16.9] | 0.828    |
| Coordination/Integration of Care*    | 4.4             | 10              | 7.2    | 7.2  | [7.06.8] | 3.9            | 8.9             | 6.7    | 6.7  | [6.27.1] | 0.05     |
| Coordination/Information System*     | 3.3             | 10              | 6.7    | 7.1  | [6.77.4] | 5.6            | 10              | 8.9    | 8.4  | [7.98.8] | 0.001    |
| Comprehensiveness/Available Services | 4.7             | 9.4             | 6.8    | 6.9  | [6.77.1] | 5.1            | 8.3             | 6.9    | 6.9  | [6.67.3] | 0.629    |
| Comprehensiveness/Services Provided  | 2.7             | 10              | 6.9    | 6.8  | [6.47.1] | 5.6            | 10              | 7.8    | 7.8  | [7.38.3] | 0.009    |
| Total Essential Score*               | 4.8             | 9.1             | 7.1    | 7    | [6.87.2] | 5.2            | 8.4             | 6.7    | 6.5  | [6.26.7] | 0.002    |
| Derivatives                          |                 |                 |        |      |          |                |                 |        |      |          |          |
| Family Orientation                   | 4.4             | 10              | 8.9    | 8.5  | [8.28.8] | 4.4            | 10              | 8.9    | 8.8  | [8.39.3] | 0.262    |
| Community Orienattion*               | 3.3             | 10              | 6.1    | 6.4  | [6.16.8] | 3.3            | 8.3             | 5.6    | 5.3  | [4.85.8] | 0.004    |
| Total Derived Score                  | 5.3             | 10              | 7.5    | 7.4  | [7.27.7] | 4.4            | 9.2             | 6.9    | 7.0  | [6.77.4] | 0.160    |
| Overall Score*                       | 5               | 9.2             | 7.2    | 7.1  | [6.97.3] | 5.4            | 8.6             | 6.7    | 6.6  | [6.46.9] | 0.003    |

Note: PHC – Primary Health Care; DSEI-ARN – Alto Rio Negro Indigenous Special Sanitary District; SEMSA - Municipal Health Department; \*Attributes that showed significant difference for Kruskal-Wallis test at 0.05 level.

Regarding the derived attribute, both groups presented low degree of orientation for PHC in the community orientation attribute. Although both were classified as low degree of orientation, there was a statistically significant difference between the groups and the DSEI-RNA group was closer to the 6.6 cutoff point.

For the Derived Score, no difference was found between the two groups, both values are above the 6.6 cutoff point, with a DSEI-RNA median of 7.5 and a SEMSA median of 6.9.

Finally, for the Overall Score, a significant difference (p < 0.003) was found between the two groups, with the highest value found for the DSEI-RNA group, with a median equal to 7.2, and the lowest for the SEMSA group, with 6.7. Both were defined with a strong degree of orientation for PHC, although for the SEMSA group this median score is borderline 6.6, limit established as cutoff point.

# **DISCUSSION**

Analyzing the data by attributes, it was shown that, in the experience of medical professionals and nurses, the "first contact access - accessibility" was the group of SEMSA that presented the lowest median score. DSEI-RNA, on the other hand, obtained the median above the cutoff point established in PCATool, indicating a strong degree of orientation for this attribute.

Some variables that make up this attribute contributed to indicate the low orientation for PHC in the services offered by SEMSA. As an example is the opening hours of the units; communication with the unit and its professionals, the organization and structure of health services in the municipalities of Upper *Rio Negro*. FHS units are open during business hours on weekdays, and many have no telephone or other communication between service and community.

This result is similar to those found in other studies<sup>(11-15)</sup>, in which the results showed low score for the access attribute, from the perspective of health professionals. We can say that, as a whole, these analyzes point to the relationship between structural and organizational lack of health services existing in the municipalities. Another shortcoming refers to the forms of

communication between users and service and between users and professionals.

The international literature that used the same tool shows that this attribute also had low score in other countries, from the perspective of health professionals, as in the case of the study by Rodríguez-Villamizar, Acosta-Ramírez and Ruiz-Rodríguez<sup>(16)</sup>.

Regarding access to DSEI-ARN, it was assessed by health professionals as a strong degree of orientation for PHC. This result may be related to the organization of services within the villages, as described in the Brazilian National Policy on Indigenous Health Care (*Política Nacional de Atenção à Saúde Indígena*)<sup>(5)</sup>. This policy informs the existence of the base poles that act as an intermediate reference. These centers receive patients referred by indigenous health agents and, when necessary, referring them to the most complex levels in municipal headquarters. The health professionals who work there remain for 30 consecutive days in an indigenous area and, after this period, are replaced by another team, which will remain in the area for the same time. Nevertheless, the permanence of these professionals has been discontinued due to several factors, such as inadequate logistics, insufficient inputs, turnover of professionals, among others.

Despite this positive assessment, the 2014 DSEI Upper *Rio Negro* Health Care Monitoring and Surveillance Report (*Relatório de Monitoramento das Ações de Atenção e Vigilância à Saúde*) shows indicators that reflect, in general, the difficulties in the population's access to health services within the district territory.

The access of indigenous people to PHC actions is indicated in the report cited above, by only two indicators as the annual mean of medical and nursing care by base pole, per inhabitant and per year, which indicated the index below the agreed level in the District Plan.

The high result found in the median (7.8) of DSEI-RNA access differs from the study that analyzed access to health services and their use by elderly people living in rural areas in Brazil. Data showed that barriers to access were higher in rural than in urban areas. Overall, there is less access and consequently less use of health services by rural populations, either due to the lower

availability of services, the long distances to be traveled or the difficulties of transportation<sup>(17)</sup>.

The study by Kassouf<sup>(18)</sup> also points towards the difficulty of access of the population to health services, especially when comparing urban and rural areas. This difficulty is related to several factors. They are poor condition of rural access roads; geographical barriers; lack of transportation for the health team to move to rural locations; lack of adequate support points to assist users in their localities<sup>(19)</sup>, as can be found in the Upper *Rio Negro* region.

The possible factors that caused better access in DSEI-ARN, in relation to the municipal offices (SEMSA), may be related to the existence of a specific health policy for the indigenous population. This infrastructure consists of Health Centers and base centers used as a point of care, transportation for the movement of patients and health teams, permanent presence of professionals and, thus, greater availability of health services.

Considering each variable that makes up the longitudinality attribute, it is possible that this result is related to the high turnover of health professionals; poor communication between professionals and users; little knowledge of professionals about the family; users' employment situation found in the Upper *Rio Negro* region. This result was also found in other studies comparing FHS units and traditional units<sup>(14)</sup>.

The coordination/information system attribute presented high scores in both DSEI-ARN and SEMSA, although with better SEMSA performance, as opposed to coordination/integration of care. The DSEI-RNA had a better score, showing that, in this attribute, both services have strong PHC orientation. There are favorable conditions regarding the existence of registration and availability of information for the development of the coordination implemented in the Upper *Rio Negro* region. For Starfiled<sup>(3)</sup>, coordination is based on the availability of information about previous problems and services and their recognition to meet current needs.

Regarding the dimension of the comprehensiveness/available services attribute, it can be observed that both DSEI-ARN and SEMSA have strong PHC orientation. However, of the twenty-two variables analyzed in this attribute, five were statistically significant when compared to health professionals' responses by institution. In both institutions, some health actions are still little present in the routine of services, such as the identification (some kind of assessment) of hearing problems and removal of ingrown nails.

Some variables that constitute the attribute comprehensiveness/ services provided show a worrying reality in both health services, due to the little importance in the approach of professionals who attend both services. Among the variables we can highlight the management of family care and children's behaviors.

This result indicates the need for better qualification of professionals regarding care in the management of the most common conditions and of great impact on the health of the indigenous and non-indigenous population living in this region.

The survey data are similar to studies of comparative nature between health services in PHC<sup>(11-12,14,20)</sup>, which show positive results, in the view of professionals, for completeness, both in the form of "services available" as "services provided".

Family orientation was another attribute assessed in this study, referring to the professional's recognition of the patients' ideas

and opinions about care/treatment plan and health needs of the family as a whole. The data found suggest that these characteristics are present in the work process of health professionals from the Upper *Rio Negro*, since a high score was found, regardless of which institutions the professionals were linked to.

The high values attributed to this attribute by health professionals were also evidenced in studies conducted in PHC<sup>(11-12)</sup>. They can be attributed, according to the authors, to the principles incorporated in the construction of PHC in the municipality, such as territorialization, health surveillance and sanitary responsibility, present in the models of health care in the municipalities.

The difficulty in the family approach found was also observed in other researches in primary care, which used the PCATool - Brazil, professional version, where the values found were classified as low score for this attribute<sup>(14,21)</sup>. The opposite was observed in the study by Chomatas<sup>(12)</sup>, in which a high score was attributed to the family approach, when he used the same methodology to assess this attribute within the PHC in the basic health network in the city of Curitiba.

In the community orientation attribute, the results showed a low score. This result was due to the negative assessment attributed by DSEI-ARN and SEMSA professionals in the variables related to the lack of research to verify user satisfaction; identification of the most common health problems in the professional's operating territory; community participation; and social control in the actions and health services of both institutions, with the highest positive frequency in the responses of DSEI-ARN professionals.

The derived score, in both institutions, obtained high values, showing that, from the perspective of professionals who work in PHC in the Upper *Rio Negro*, PHC is present in these health services.

Thus, the dimensions of primary care proposed by Starfield<sup>(3)</sup>, which are of special importance for the analysis of potentialities when assessed together in the comparison between the two groups, can reach satisfactory values in the PHC field in the Upper *Rio Negro* region. However, there are accessibility issues in SEMSA PHC, and in both types of services there are problems with community orientation, both services with low orientation and longitudinality with cutoff point results.

# **Study limitations**

Although this study has achieved its objectives, it is understood as a possible limitation to the assessment only from the perspective of health professionals. Another limitation is the lack of recent studies with different methodological approaches to indicate other variables capable of assessing PHC services in different Amazonian contexts.

## Contributions to nursing and health

This would imply that nursing professionals incorporate, within the scope of health actions, the ability to understand (and act upon) the cultural specificities of the population; enable ways to improve equitable access to health services and quality of care; generate impacts on health indicators; offer specific epidemiological information regarding the health of indigenous populations and propose intervention strategies that are appropriate to sociocultural realities.

#### **CONCLUSIONS**

Although SEMSA achieved a score very close to the established limits, the professionals of both health institutions positively assessed the PHC attributes, especially those considered as essential and derived.

The DSEI and SEMSA groups that work in RNA presented high Overall Score (≥6.6) in six of the eight assessed attributes, indicating strong orientation for PHC. The longitudinality and community orientation attributes presented the lowest score (<6.6) from the perspective of DSEI professionals. While among SEMSA professionals

the attributes with the lowest score were accessibility and community orientation.

From the perspective of health professionals, the presence and extension of PHC attributes are present in Upper *Rio Negro* health services, both those offered by DSEI and SEMSA. The study results point to the need to implement effective strategies that positively impact the management model and work processes, from the perspective of being strongly guided by the attributes of PHC, raising the levels of quality and attention in the services offered to the population from *Rio Negro*.

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