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# Interprofessional collaboration in primary health care: the team's intentions versus the reality of work processes

Interprofissionalidade na atenção primária: intencionalidades das equipes versus realidade do processo de trabalho

La colaboración interprofesional en la atención primaria: la intencionalidad de los equipos versus la realidad del proceso de trabajo

#### ABSTRACT

Objective: to compare self-reported interprofessional attitudes according to the teams from different primary health care services with the actual context of work processes. Method: Quantitative and qualitative study in which data were collected in two stages between December of 2019 and October of 2020. Systematic observation was the strategy used to collect data from primary health care centers. A script based on the Canadian Interprofessional Health Collaborative framework and the Analyzer Flowchart was used to observe the patient-centered work process. Observations were recorded in a Field Diary, and the Brazilian version of the Jefferson Scale of Attitudes Toward Interprofessional Collaboration was used. **Results**: 91 primary health workers completed the scale. The median score was 120, meaning all the health teams value collaborative work. Nonetheless, differences were found between what the participants say and what they do, considering that the structured work process limits collaborative practice. **Conclusions and Implications to Practice:** the services need to value programmed activities to promote interprofessional collaboration among health and nursing teams working in primary health care, and reserve time, and give opportunities for meetings to occur. Additionally, training addressing interprofessional collaboration needs to be provided to workers in addition to public policies to ensure mechanisms that promote collaborative practices.

Keywords: Working Environment; Primary Health Care; Workflow; Workforce; Interprofessional Relations.

#### RESUMO

Objetivo: comparar atitudes relacionadas à colaboração interprofissional autorrelatadas por diferentes equipes da atenção primária com a realidade observada de seus processos de trabalho. Método: abordagem qualitativa e quantitativa implementada em duas etapas de coleta de dados, entre dezembro de 2019 e outubro de 2020. Na qualitativa, empregou-se a observação sistemática dos atendimentos em unidades de saúde. Utilizou-se roteiro de observação baseado no Referencial para Competências em Interprofissionalidade e no Fluxograma Analisador do processo de trabalho centrado no usuário. As observações foram registradas em diário de campo. Na etapa quantitativa, aplicou-se a Escala de Atitudes Relacionadas à Colaboração Interprofissional. **Resultados:** noventa e um profissionais da atenção básica responderam a escala. Obteve-se uma média de 120 de pontuação, que significa valorização do trabalho colaborativo por respondentes de todas as equipes. Apesar disso, foram observadas divergências entre o falado e o vivido, pois o processo de trabalho estruturado parece limitar atitudes colaborativas. **Conclusões e implicações para a prática**: valorização de atividades programadas para o trabalho interprofissional da equipe de saúde e de enfermagem na atenção primária, como espaços na agenda para reuniões. Necessidade de promoção da educação interprofissional com trabalhadores, bem como de políticas públicas que garantam mecanismos para o trabalho colaborativo na atenção básica.

Palavras-chave: Ambiente de Trabalho Colaborativo; Atenção Primária à Saúde; Fluxo de trabalho; Equipe de trabalho; Relações Interprofissionais.

#### RESUMEN

Objetivo: comparar las actitudes relacionadas con la colaboración interprofesional autoinformada por diferentes equipos de la atención primaria con la realidad observada en sus procesos de trabajo. Método: investigación cualitativa y cuantitativa. La recolección de datos ocurrió entre diciembre de 2019 y octubre de 2020. En la etapa cualitativa se utilizó la observación sistemática de la atención en las unidades de salud, con un guión de observación basado en el Referencial de Competencias Interprofesionales y el Diagrama Analizador del Flujo del proceso de trabajo centrado en el usuario. Registramos las observaciones en el diario de campo. En la etapa cuantitativa se aplicó la Escala de Actitudes Relacionadas con la Colaboración Interprofesional. Resultados: 91 profesionales respondieron la escala. Se obtuvo una media de 120 puntos, lo que supone valorización del trabajo colaborativo por profesionales de todos los equipos evaluados. Sin embargo, verificamos diferencias entre lo relatado y lo vivido, ya que el proceso de trabajo estructurado parece limitar las actitudes para el trabajo colaborativo. Conclusiones e implicaciones para la práctica: valorización de actividades programadas para el trabajo interprofesional de los equipos de salud y de enfermería, como reuniones programadas. Necesidad de promoción de la educación interprofesional, así como de políticas públicas que garanticen mecanismos de trabajo colaborativo.

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Palabras-clave: Ambiente de Trabajo; Atención Primaria de la Salud; Flujo de trabajo; Recursos Humanos; Relaciones Interprofesionales.

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## INTRODUCTION

Given increasingly complex health needs, the problem-solving capacity of services includes the integral approach of individuals, which implies acknowledging different types of knowledge. In the opposite direction, considerable difficulties are routinely imposed by a rigid division of labor marked by professional fragmentation at the three levels of the Brazilian Unified Health System (SUS) <sup>1-2</sup>. In this context, interprofessional collaboration has been characterized as an alternative to enable the organization of health care from a perspective of broadened clinical practices centered on the individuals, families, and community<sup>3</sup>.

Interprofessional collaboration occurs when workers from different educational backgrounds work together as a team. Collaboration implies the planning and implementation of health actions<sup>4</sup>. For that, the workers' actions must be compatible with the same clinical purpose based on mutual supportive relationships in addition to seeking participatory practices together with patients<sup>5</sup>.

Primary Health Care (PHC) plays a central role in reorganizing health services as provided by SUS. Since 1996, PHC is implemented through the family health strategy to promote a PHC model based on the coordination of care, complying with the principles of integrality, universality, and equity promoted by SUS, in which teamwork is one of its operational guidelines<sup>1.3</sup>.

Therefore, interprofessionality is essential to achieve integral care within PHC<sup>6</sup>. According to the new *Política Nacional da Atenção Básica (PNAB)* [PHC National Policy]<sup>7</sup>, all professionals are responsible for integrating the different types of knowledge, technical areas, and health care levels to meet the population's needs and demands<sup>7</sup>.

The *PNAB*<sup>7</sup> last version proposes changes with an emphasis on teams. It provides for the maintenance, among other things, of the Family Health team (*eSF*), Oral Health team (*eSB*), and Expanded Center for Family Health and Primary Health Care (*eNASF*). Additionally, it created a new modality, the Primary Care team (*eAB*)<sup>7</sup>. This change was widely criticized by entities and theorists as it meant a setback of SUS to a time when PHC was selective, focused, and reduced<sup>2.8</sup>.

Since then, other political decisions have impacted PHC in Brazil. For instance, there is the *Programa Saúde na Hora* [Hour Health Program], which changes the health centers' hours of service and proposes a new form of financing primary health care, which replaces the fundraising indicator according to the cities by the number of people registered<sup>2</sup>.

All these normative changes alter the micro policy of PHC units (UBS), especially the collaborative work environment<sup>9</sup>, potentially causing a mismatch between institutional norms and professional practice<sup>9</sup>, between what is "said" and "done"<sup>10</sup>. The recent implementation of interprofessional collaboration in the Brazilian context represents a challenge<sup>4</sup>, an aspect potentially affected by changes in the work processes and teams.

Given this context, the following questions are asked: how to implement (collaborative) work in a context that demands interdisciplinary practice and teamwork? Are there differences in terms of interprofessional collaboration in the care provided by the PHC teams? Are there divergences between what is said and done within teamwork? Based on these questions, this study's objective was to compare attitudes toward interprofessional collaboration reported by the different PHC teams with the actual work processes.

# **METHODS**

This is a quantitative-qualitative, cross-sectional and exploratory study<sup>11</sup>. The study's setting was composed of different PHC services in the city that is the reference of a health region located in the interior of Goiás, Brazil. The region comprises ten cities, with populations that make up 215,282 people<sup>12</sup>.

The city that is the regional headquarters, setting of this study, has 100,882 inhabitants; 80,730 (80.02%) of whom are covered by the PHC services composed of 11 PHC units: ten services in the urban area and one in the rural area, with one eAB team and 21  $eSF^{12-13}$ .

The study was conducted in two stages, qualitative and quantitative, between December 2019 and October 2020. The reason for conducting these two stages separately was to avoid potential bias concerning interference of the different techniques adopted in each of the stages, detailed below. Note that the qualitative stage occurred before the COVID-19 pandemic and the quantitative stage during the pandemic.

#### **Qualitative stage**

Observation was the technique used to collect data in the qualitative stage. In order to ensure representativeness and an overall understanding of the work processes in the units composing the health network under study, the UBS selected for this stage met the following criteria: i) UBS with *eAB* or UBS with *eSF* and *eSB*; ii) located in the urban area.

Two services were included in this study: one UBS with *eAB* and five UBS with *eSF* and *eSB*. Three were located in the city's central area and three in the periphery, all of which covered extensive areas. The Expanded Center for Family Health and Primary Health Care (*eNASF*) was not included in the qualitative stage because it provides care to a limited number of units in the city.

Systematic observation<sup>11</sup> was the technique adopted to observe the health services during two months. The relationships and interactions between workers and patients were observed together with aspects concerning the reception and screening of patients, individual consultations, collective services, team meetings, and referral/counter-referral. Observations and perceptions were recorded on a field diary<sup>11</sup>.

Two instruments were used: a script developed by the research team based on the Canadian Interprofessional Health Collaborative (CIHC) framework<sup>14</sup> and Analyzer Flowchart<sup>9</sup>.

The CIHC framework presents six domains of essential competencies for collaborative practice, namely: role clarification – each worker understands the specific responsibilities of each profession; Patient/client/family/community-centered care – everyone involved is integrated and engaged in the

implementation of care; team functioning – the professionals understand the principles of teamwork dynamics to enable effective collaboration; collaborative leadership – workers make decisions together, and everyone naturally and freely exercises leadership; interprofessional communication – everyone communicates in a collaborative, responsive and responsible manner; and interprofessional conflict resolution – workers become engaged and involved, including patients and families, working through potential tensions experienced during care delivery, acknowledging the positive nature of disagrements<sup>14</sup>.

The Analyzes Flowchart<sup>9</sup> provides geometric figures to express patient-centered care produced in the health work process. The figures are ellipse to identify the times a patient enters and exits from the service, diamond to describe decisionmaking instances in the service flow, and square to characterize the menu of interventions available<sup>9</sup>.

Two symbols were added to express interprofessional collaboration in the Analyzer Flowchart<sup>9</sup>: exclamation mark and zigzag. Exclamation marks refer to collaborative practices, whereas zigzag signals lack of communication or collaboration in that stage of the service. The Teams in the six UBS were approached for the qualitative stage simultaneously. The researchers requested permission and authorization to monitor the services' routine.

Thematic content analysis<sup>15</sup> was the technique used to interpret the records in the field diary using the NVivo software. First, the material was transferred to the program, and the following steps were implemented: identification of the material according to each UBS selected; ii) free-float reading the entire material; iii) coding; iv) exploration of coded data to identify differences and similarities in the organization of services; v) categorization according to Analyzer Flowchart,9 distinguishing between UBS with *eSF* and UBS with *eAB*; and vi) inferences.15 Analyzer Flowchart9 was developed based on the thematic categories using Corel Draw 2020.

#### **Quantitative stage**

After observations, the workers were invited to participate in the quantitative stage. Nurses and nursing technicians, physicians, community health agents (CHA), dentists, dental assistants, and other professionals working in the *eNASF* took part in this stage and were recruited according to convenience sampling. Workers on vacation or sick leave were not included.

The Brazilian version of the Jefferson Scale of Attitudes Toward Interprofessional Collaboration (JessSATIC) was used. Its original version<sup>16</sup> was translated and validated in Brazil in 2015<sup>17</sup>. It is composed of 20 items rated on a Likert scale ranging from one to seven in which (1) Completely disagree is the lowest level of agreement, and (7) Completely agree is the highest<sup>16</sup>.

Sociodemographic data were also collected, including sex, age, profession, and educational and professional background. The sociodemographic instrument and the Brazilian version of JessSATIC were created in Google Forms and sent via WhatsApp and e-mail to all the PHC workers, including those who participated in the qualitative stage. The City Health Department provided the professionals' contact information.

Descriptive statistics were conducted using Statistical Package for the Social Sciences (SPSS) version 24.0. Continuous variables were represented by mean  $\pm$  standard deviation. The scores obtained in the JessSATIC were based on raw scores (mean and standard deviation) and on isolated items (median and mode). Categorical data were presented in absolute frequencies and percentages (%).

The Institutional Review Board at the hosting university approved the study. Due to the novel coronavirus pandemic, this study was approved by opinion reports No. 3707497 from November 14<sup>th</sup>, 2019, and No. 4.144.874 from July 9<sup>th</sup>, 2020; the latter concerns amendments to the collection of data during the pandemic.

The individuals who completed the structured interviews read and provided their consent according to the free and informed consent forms. A digital copy of the consenting form was sent to participants' respective emails, and one was saved on the university's computer.

## RESULTS

# Characterization of the participants and primary health care

Ninety-one participants completed the Brazilian version of the JessSATIC; 35 refused the invitation or did not reply after the team contacted them three times. This high refusal rate is possibly explained by the pandemic, considering these workers were on the frontline.

Among the participants, 91.2% were women aged 40.81 on average ( $\pm$  10.02). Time since graduation was 11.21 ( $\pm$  8.42) years on average; 56% had a college education. The average length of time working for SUS was 10.94 ( $\pm$  7.65) years, and within PHC was 7.42 ( $\pm$  6.21) years. Table 1 presents the mean scores obtained in the JessSATIC according to the profession, subdivided into groups i) *eAB*, *eSF*, *eSB*; and ii) *eNASF*.

Among the professionals, 69 (75.8%) were from the *eSF* and 8 (8.8%) from *eAB*. The overall mean score obtained in the JessSATIC was 120 ( $\pm$  10.92): 119 ( $\pm$  10.63) was obtained by the family health and oral health teams, and 126 ( $\pm$  6.93) by the *eNASF*. Hence, all the professionals acknowledged the importance of interprofessional collaboration within health services regardless of their units.

The workflow implemented in the *eSF*, *eSB* and *eAB*, including administrative workers, was observed. The main difference found between the teams was the work performed by the *eAB* with other health workers within the same facility, as noted in the field diary:

The nurses and general practitioners in this UBS (with *eAB*), work independently of the remaining professionals, including those workers linked to the smoking, tuberculosis, leprosy, and women's health programs. In turn, the nursing technicians, pharmacists,

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**Table 1** – Mean scores obtained in the JessSATIC according to the profession, subdivided into two groups within the PHC team – *eAB/eSF/eSB* and *eNASF*. Goiás, Brazil 2020.

TEANAC	WORKERS	JessSATIC	
TEAMIS	N (%)	MEAN (±SD)	
eAB/eSF/eSB			
Community Health Agent	23 (25.3)	114.74 (±11.27)	
Administrative Assistant	3 (3.3)	111.67 (±11.37)	
Nursing	12 (13.2)	122.58 (±8.18)	
Medicine	10 (11.0)	123.50 (±7.57)	
Dentistry	8 (8.8)	123.57 (±5.85)	
Nursing technician or aid	17 (18.7)	119.71 (±11.36)	
Dental technician or assistant	4 (4.4)	117.75 (±16.37)	
eNASF			
Physical education	1 (1.1)	133*	
Pharmacy	2 (2.2)	126.00 (±7.07)	
Physical therapy	4 (4.4)	125.75 (±4.78)	
Speech therapy	1 (1.1)	128*	
Nutrition	2 (2.2)	115.00 (±2.82)	
Psychology	2 (2.2)	133.00 (±2.83)	
Missing data**	2 (2.2)	112.5 (±31.8)	

\* Note: absolute value \*\* Missing data: workers did not report profession **Source:** Developed by the authors.

and the reception staff interact with other workers, i.e., five nurses and five physicians, two of whom are pediatricians, two gynecologists, and one dermatologist. (Field Diary. December 2019).

The UBS with *eSF* and *eSB* are located in different regions of the city, and the facilities' physical structures vary. However, all the units have at least one reception, medical, nursing, and dental care offices, vaccine room, dressing room, an area for screening patients, material storage, material and sterilization center, bathrooms, and cafeteria.

#### Health work process – Analyzer Flowchart

The routine in an *eAB* is very intense, and the work is organized as follows: the patients arrive at the reception to schedule an appointment, which is scheduled according to the professionals' availability, or patients are referred via the *Sistema Nacional de Regulação (SISREG)* [National Regulation System]. Upon arrival, patients undergo screening, when the nursing technician also verifies vital signs, after which patients are instructed to wait for medical or nursing care.

We verified during data collection that the professionals worked in isolation, with little communication and exchange of information to give continuity to care delivery. These aspects are reinforced in the field diary: In an informal conversation with the patients in the reception room, one of the patients reported that he receives assistance, and his complaints are heeded whenever he needs assistance from different professionals. However, he stated that he had not witnessed these professionals working together during consultations. I verified that referrals between the teams were made via the referral and counter-referral form (Field Diary. December 2019).

After consultations, the patients go to the unit's pharmacy to obtain the medication prescribed. Next, most patients go to the reception to schedule the return visit and clarify doubts. This workflow is repeated in the UBS routine, with little or no differences in the care provided by *eAB* or other health programs.

The workers reported that the teams composing the programs do not organize meetings. However, they have witnessed physicians and nurses discuss cases, revealing an interprofessional perspective of the work. An aspect that is reinforced by the following:

So far, no collective consultations were observed; instead, fragmented "brief meetings" or dialogues occasionally occur in the corridors or offices between workers from different professions (Field Diary. February 2020).

Administrative meetings to discuss aspects of the service organization revealed that the administrative coordinator promotes occasional meetings in the UBS's reception. Additionally, the nursing staff meets once a month under the leadership of the team's nurse coordinator, and the subjects are related to the nursing profession. Figure 1 depicts the workflow of the work process in the UBS with *eAB*.

The UBS with *eSF* and *eSB* have similar workflows. Waiting in some units is organized by digital signage displays, while in other units, the patients are verbally called by the reception workers. All UBS verify whether appointments were previously scheduled and are walk-in visits.

In both cases, patients are screened and their vital signs and anthropometric measures checked. The services include prenatal and puerperium care, family planning, gynecological consultation, men's health, children and adolescent care, elderly care, chronic diseases, and dental care. Then, the patients are referred to the respective services according to their needs.

Walk-ins can request technical procedures, such as measuring blood pressure, blood glucose, and dressings, i.e., they make a request at the reception and are directed to the nursing staff.

In general, the conversations among the different professionals address follow-up cases and take place in the corridors between one consultation and another, including informal meetings during the morning snack in the cafeteria. The following excerpt shows this aspect:

Today I participated in a conversation among the CHA, nurses, dentists, technicians, and physicians. They were

talking about the elderly group on Thursdays. They were discussing how each professional could help because the demand increased in recent months (Field Diary. January 2020).

These units offer various collective activities, such as the School Health Program implemented in municipal schools. Additionally, groups such as pregnant women and mixed groups involving health techniques, disease prevention education, and handicrafts workshops are also provided. Collective health education also occurs in the UBS waiting room or the community, such as churches, events, and daycare services. The workflow of the work process is presented in Figure 2.

# Interprofessional collaboration between the participants

Table 2 presents the absolute and relative frequency, median, and mode of the answers provided to the JessSATIC 20 items.

Data presented in Table 2 reveal strong collaborative and interprofessional attitudes among the workers completing the questionnaires. However, divergences were found when comparing qualitative results and observations regarding the workflow in the services where these professionals work.

Data collected during observations and the UBS's workflow reveal a work process involving occasional and unplanned dialogues and conversations among the workers. In contrast, 86.8% of the respondents disagreed with item 5, in which the harmful effects caused to patients by potential questions



**Figure 1** – Flowchart of the patient-centered work process in the UBS with *eAB* focused on interprofessional collaboration, Goiás, Brazil. 2020. **Source:** Developed by the authors

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**Figure 2** – Flowchart of the patient-centered work process in the UBS with *eSF* and *eSB* focused on interprofessional collaboration, Goiás, Brazil. 2020. **Source:** Developed by the authors

within the health team are addressed. In this sense, all (100%) participants agreed that their colleagues from other professions in the health field could collaborate on the quality of the care provided (Item 13).

The workflow of both the *eAB* and those units with *eSF* shows a work process structured according to institutional standards and protocols established by the service. When a patient arrives at the unit, previous decisions are checked, for instance, whether the patient has an appointment already scheduled or seeks technical procedures, vaccines, or needs to schedule an appointment. A menu of services, previously determined by the different health programs and the management, is available to meet the demands according to decisions.

Opportunities to dialogue and interprofessional interactions may be lost in the service's unidirectional workflow. Despite a rigid work process, the participants' answers to the JessSATIC are contrary to their routine in the UBS. Note that 85.7% of the respondents did not agree with item 16, which addresses the benefits for patients of health workers' isolated decision-making.

Likewise, 95.6% of the participants confirmed that the team members should collaborate with decision-making intended to improve care delivery, an aspect that clashes with the context addressed in this study. Brief conversations addressing the cases established in informal settings such as in the corridors and cafeteria were observed; occasionally, CHAs reported cases to physicians. However, all (100%) participants agreed with the importance of establishing a close work relationship to contribute to collaborative practices (Item 7). When answering this item, the participants were possibly considering the long and warm conversations we observed during snack time in the cafeteria.

As the services had no schedule for meetings to discuss clinical cases or work aspects, the decisions regarding the care provided to each individual and their families seem to be autonomous. However, even in this context, 92.3% of the PHC participants agreed that all workers could contribute to decision-making to improve care delivery (Item 11). Additionally, 85.8% agreed with the participation of the health team in political-administrative decision-making (Item 14).

#### DISCUSSION

The results revealed divergences between the context observed and the workers' answers. For example, the UBS' work processes reveal little collaboration between workers; however, their answers to the interprofessional collaboration scale indicated strong collaborative and interprofessional attitudes, regardless of the team configuration.

Despite the working conditions and the field of practice, data show that the professionals acknowledge the importance of collaborative work and interprofessional relationships in

**Table 2** – Synthesis of the 20 items in the Jefferson Scale of Attitudes Toward Interprofessional Collaboration regarding absolute and relative frequencies, median, and mode of PHC workers (n=91). Goiás, Brazil. 2020.

	SCALE*				Mada	
ITEM STATEMENTS		1-3	4	5-7	Median	would
1	Health professionals should be viewed as collaborators rather than superiors or subordinates.	3(3.3%)	3(3.3%)	85(93.4%)	7	7
2	All health professionals should have responsibility for monitoring the effects of interventions on their patients/ clients.	2(2.2%)	6(6.6%)	83(91.2%)	7	7
3	Teamwork in healthcare cannot be an outcome of interdisciplinary education.	70(77%)	7(7.7%)	14(15.3%)	2	1
4	Academic institutions should develop interdisciplinary educational programs to enhance collaborative practice.	5(5.5%)	6(6.6%)	80(87.9%)	7	7
5	Health professionals should not question decisions made by colleagues even if they feel that it might have detrimental effects on the patient/client.	79(86.8%)	4(4.4%)	8(8.8%)	1	1
6	All health professionals should contribute to decisions regarding improving care of their patients/clients	5(5.5%)	2(2.2%)	84(92.3%)	7	7
7	Collaborative practice always works best when health professionals develop working relationships to achieve agreed upon goals.	0(0.0%)	0(0.0%)	91(100%)	7	7
8	Interdisciplinary education and interprofessional collaboration are not linked to one another	69(75.8%)	10(11.0%)	12(13.2%)	1	1
9	The primary function of other health professionals is to follow, without question, orders by the physician who are treating the patients/clients.	65(71.5%)	8(8.8%)	18(19.7%)	2	1
10	Interprofessional collaboration, which includes mutual respect and communication improves the work environment.	0(0.0%)	0(0.0%)	91(100%)	7	7
11	All health professionals should contribute to decisions regarding improving care of their patients/clients.	1(1.1%)	0(0.0%)	90(98.9%)	7	7
13	Health professionals should be made aware that their colleagues in other health-related disciplines can contribute to the quality of care.	0(0.0%)	0(0.0%)	91(100%)	7	7
14	Health professionals should be involved in making policy decisions concerning their work.	5(5.5%)	8(8.8%)	78(85.8%)	6	7
15	Because of role differentiation, there are not many overlapping areas of responsibility among health professionals in providing care to their patients/clients.	32(35.1%)	23(25.3%)	36(39.6%)	4	4
16	. To promote the best interest of the patient/client, health professionals should use their own judgment rather than consulting their colleagues in other health-related disciplines.	78 (85.7%)	5(5.5%)	8(8.8%)	1	1
17	Medical errors will be minimized when collaboration exists among health professional	8(8.8%)	5(5.5%)	78(85.7%)	7	7
18	All health professionals have their own special expertise to render quality care to their patients/clients.	4(4.4%)	7(7.6%)	80(88%)	6	7
19	Health professionals working together cannot be equally accountable for the care/service they provide.	54 (59.3%)	9(9.9%)	28(30.8%)	3	1
20	During their education, all health profession students should have experience working in teams with other health profession students in order to understand their respective role.	6(6.6%)	0(0.0%)	85(93.4%)	7	7

•Note: Scale 1 (completely disagree) to 7 (completely agree) Source: Developed by the authors

health services. This aspect shows that the discreet signs of collaborative work do not imply hostility or competition, nor do they discard a desire to work collaboratively. Many individual factors and factors concerning interpersonal relationships and organizational conditions influence interprofessional collaboration in health care<sup>18</sup>.

Concerning physical conditions, this study's observations showed few units with rooms reserved explicitly for meetings, and workers seldom gather for meetings. Having an infrastructure that does not favor interprofessional collaboration is characteristic of many UBS. The facilities' structures are deficient throughout Brazil, with only 4.8% of the services rated "A," i.e., having a set of reference standards criteria, including a room specifically reserved for collective meetings<sup>19</sup>.

Studies show that programmed meetings are one strategy that contributes to the consolidation of interprofessional practice<sup>20,21</sup>, as communication supports collaborative work<sup>14</sup>. Other studies also indicate that the services seldom, or never, organize meetings to discuss clinical cases or aspects of the service organization<sup>14,21</sup>.

Dialogues established among health workers are inherent to teamwork and democratic decision-making.<sup>20</sup> Even though the workers' answers provided to the JessSATIC acknowledge the importance of communication, occasional and informal conversations were observed in the work process. To understand this contradiction, we should remember that interprofessional collaboration is relatively novel in the Brazilian PHC context. This fact is corroborated by the few papers published in the Brazilian literature; most were published in the last five years<sup>4,22</sup>.

Considering that a significant portion of the PHC workers graduated more than a decade ago and have worked for SUS for a similar period<sup>23-24</sup>, including this study's participants, reinforces the importance of providing interprofessional education.

Continuous education contributes to work health aligned with integral care and to a view that goes beyond basic academic training based on a not sustainable and fragmented care model<sup>23</sup>. A model that does not support the changes necessary for the integral delivery of care, interprofessional practice, and collaborative work, aspects that are essential in PHC<sup>24</sup>.

Perhaps, the divergent answers concerning the context of services indicate that the participants are motivated to develop collaborative practices. However, as previously mentioned, the work organization is not conducive to collaborative practices. One study addressing the motivational force of PHC workers in the northeast of Brazil identified procedural events that contributed to the gradual decline of motivation in the workplace. These events included unfavorable working conditions and a lack of training and structure. The study also shows that motivation may change over time, and collaborative practices can be a motivational strategy to optimize health care<sup>25</sup>.

The potential of interprofessional education is highlighted in this context, the objective of which is to involve students, workers, patients, and families to work collaboratively in health care. In this context, it is vital to value workers' intentions toward collaborative work, one of the most promising ways to strengthen teamwork collaboration<sup>26</sup>. It may also be the most successful problemsolving strategy to develop interprofessional collaboration among workers who recognize its importance but do not implement it in their practice.

# FINAL CONSIDERATIONS AND IMPLICATIONS FOR PRACTICE

There are divergences between what is said and done in terms of interprofessional collaboration in the PHC services addressed here. Even though the workers reported strong collaborative attitudes, the work processes revealed few interprofessional practices.

The participants' mean scores obtained in the JessSATIC were high; however, the rigid work organization restricts interprofessional collaboration in the PHC context. Comparison between the work observed in UBS with *eSF* and *eSB* and that of UBS with *eAB* shows that the first provided more opportunities conducive to collaborative work.

This study's limitations include the fact that the *eNASF* was not included in the qualitative stage, and no correlations could be established in the quantitative stage. Nonetheless, the methodology adopted in this study enabled verifying that the structured work process experienced by these workers, regardless of whether the PHC team was an *eSF*, *eSB*, or *eAB*, seems to weaken the workers' potentially interprofessional attitudes.

These results show a need for more studies to address interpersonal collaboration using mixed methods. Additionally, representative population samples are needed to establish correlations to understand more comprehensively how the context of work and public policies impact teamwork among PHC teams, especially during work amidst the Sars-Cov-2 pandemic.

Regarding implications for care practice, we highlight the need to value programmed activities to promote interprofessional collaboration among health and nursing teams in PHC, such as reserving time in the calendar for meetings to discuss cases and the work organization. Another vital aspect is to provide interprofessional education to workers to collectively devise strategies that can transform the PHC work dynamics and ways to use their motivation to implement collaborative health care practices. In this context, PHC public policies are essential, not only to establish configurations, responsibilities, and office hours but also to ensure mechanisms that promote interprofessional work processes, valuing the workers' intentions and patientcentered care.

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