Longitudinal link of the Family Health Strategy at the frontline of the Covid-19 pandemic

Vínculo longitudinal da Estratégia Saúde da Família na linha de frente da pandemia da Covid-19

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ABSTRACT This paper analyzes the Family Health Strategy (ESF) work process in the Covid-19 pandemic per the PHC longitudinal linkage attribute. This cross-sectional, descriptive, and analytical study collected primary data from a national electronic survey carried out from September to December 2020. Ceará and Paraíba, States of the Northeastern region with more than 84% ESF coverage, were included in this excerpt. The participation of female workers (962) prevailed, with Community Health Workers (ACS, 29%) and nurses (26.61%), women (81.19%), 18-39 years of age (61.85%), statutory public servants (48,75%), active in urban territories (58.63%). Approximately 92.54% of the participants worked in the period, with only 4.70% working remotely. A total of 51.53% stated that they were 'carrying out routine activities, as before', and 31.42% revealed they were 'prioritizing activities related to Covid-19'. New SUS Card registrations were made according to 67.94% of the participants. The research confirms that the ESF is a very frequent gateway, if not the main one, for Covid-19 cases and that its effectiveness for the care of the registered users is weakened although it meets the dimensions of its attribute.

KEYWORDS Covid-19. Primary Health Care. Family Health Strategy. Continuity of patient care.

RESUMO Este artigo analisa o processo de trabalho da Estratégia Saúde da Família (ESF) na pandemia da Covid-19 segundo o atributo do vínculo longitudinal da Atenção Primária à Saúde. Estudo transversal, de caráter descritivo e analítico, com levantamento de dados primários, coletados mediante inquérito nacional por meio de um survey eletrônico, de abrangência nacional, realizado no 2º semestre de convivência com a doença. No presente recorte, incluíram-se o Ceará e a Paraíba, estados do Nordeste com mais de 84% de cobertura da ESF. Prevaleceram as participações de trabalhadoras (962), sendo agentes comunitários de saúde (29%) e enfermeiras (26,61%), mulheres (81,19%), de 18 a 39 anos (61,85%), servidoras estatutárias (48,75%), atuantes em territórios urbanos (58,63%). Das participantes, 92,54% trabalhavam no período, sendo apenas 4,7% a distância. Em relação às atividades, 51,53% declararam estar 'realizando atividades de rotina, como antes'; e 31,42% revelaram estar 'priorizando atividades relacionadas a Covid-19'. Novos cadastros do Cartão SUS foram efetivados segundo 67,94% das participantes. A pesquisa confirma que a ESF é porta de entrada muito frequente, se não a principal, de casos de Covid-19 e que embora atenda às dimensões do atributo, está fragilizada em sua efetivação para o cuidado dos usuários adscritos.

PALAVRAS-CHAVE Covid-19. Atenção Primária à Saúde. Estratégia Saúde da Família. Continuidade da assistência ao paciente.

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Introduction

Covid-19 was initially detected in Wuhan, China, in December 2019. With the growing number of cases, deaths, and countries affected, the World Health Organization (WHO) declared the event a Public Health Emergency of International Concern (PHEIC) on January 30, 2020¹.

The epidemic was declared a Public Health Emergency of National Concern in Brazil on February 3, 2020^{2,3}. With the notification of more than 118,000 cases and 4,000 deaths globally, on March 11, 2020, the WHO declared the Covid-19 pandemic⁴. Just over a year later, on April 7, 2021, World Health Day (WHO), Brazil is the global epicenter of the disease, with 337 thousand deaths, a moving average of 2,775 daily deaths, reaching more than four thousand deaths within 24 hours⁵.

In the lack of previous human population immunity and a vaccine against this virus, the high infectivity of Sars-CoV-2, the etiological agent of Covid-19, exponentially increased the number of cases. Non-pharmacological interventions are indicated in this context to inhibit human-to-human transmission and slow down disease spread⁶. As a result, we could reduce the immediate health care demand and relieve the disease's consequences.

The National Primary Care Policy (PNAB)7 highlights the role of the Family Health Strategy (ESF) as the main component of the Primary Health Care (PHC) framework, in mapping the territory, collecting data on the socioeconomic e vulnerability conditions of the populations, and implementing epidemiological surveillance8,9. Sarti10 notes that PHC should be considered an essential pillar in the face of emergencies, such as the epidemics of dengue, Zika, yellow fever, Chikungunya, and now Covid-19. The Covid-19 pandemic is more than a health problem. It requires the coordination of a set of measures that transcend the immediate virus transmission chain containment, and we should think about what social model and what health system are desired to protect life, especially that of the most vulnerable¹⁰.

Implemented for 27 years, the ESF monitors 133,710,730 people in all Brazilian regions, with 62.62% population coverage, 43,286 teams staffed with nurses, doctors, dentists, nursing, oral health technicians, and about 260,000 Community Health Workers (ACS)^{11,12}, contributing to universal and comprehensive access to health, above all because of its widespread action in health promotion, prevention, care, and surveillance, since its implementation occurs through the population and territorial linkage of users to multidisciplinary teams.

In this sense, in crises that strain the health system, such as in the Covid-19 pandemic, ESF's role is unique in health protection and care, primarily due to the spread of access and people-teams interaction/linkage^{13,14}. The priority territories of the Family Health Teams (EqSF) are the most susceptible to illness and death from Covid-19, usually marked by social inequalities, an epidemiological situation with a high burden of infectious diseases, elevated prevalence of chronic conditions, psychological distress, and a significant volume of external causes, such as violence.

ESF's role should be highlighted on the front line of the fight against Covid-19, and its assessment during the pandemic is timely for its strengthening and achieving effectiveness, especially in the Northeast, a region marked by social inequalities. Longitudinality has been considered a central and exclusive PHC feature. In this sense, recent studies revealed the attribute with the worst evaluation when comparing the results of the National Program for the Improvement of Access and Quality of Primary Care (PMAQ-AB) between cycles 1 (2011-2012) and cycle 2 (2013-2014)¹⁵.

Considering the entire context described, this paper aims to analyze ESF's work process in the Covid-19 pandemic by attribute of PHC longitudinality in Ceará and Paraíba States in the second semester of living with

Covid-19. Ceará and Paraíba rank 17th and 22nd in the nominal monthly household income per capita, 17th and 23rd regarding HDI, and 2nd and 5th concerning the percentage of the population below the line of poverty among the Brazilian States, and, therefore, with most of its population very vulnerable to Covid-19.

Research methods

The information presented and analyzed in this paper is an inaugural excerpt of the National Research Analysis of the ESF Work Process in the Covid-19 Pandemic (ESF_ COVID-19_Brasil) being implemented. The ESF_COVID-19_Brasil is conducted through an academic partnership established between the Oswaldo Cruz Foundation (Fiocruz-CE and the Center for Strategic Studies), the Federal University of Paraíba, and the Federal University of Ceará. It had the institutional support of the National Council of Health Secretaries, the National Council of Municipal Health Secretariats, and the Councils of Municipal Health Secretariats. It consists of an exploratory, cross-sectional, descriptive, and analytical study16 with primary data collection through a national survey, employing the electronic survey method.

The main PHC theoretical frameworks underpinning the research were the productions of Barbara Starfield and the PHC Research Network of the Brazilian Association of Collective Health, the National Primary Care Policy (PNAB)⁷, and the protocols published in 2020 by the PHC Secretariat of the Ministry of Health during the Covid-19 pandemic – protocols that, respectively, guide the reorganization of the teams' work process and the Covid-19 coping practices, the occupational protection measures, and the reorganization of ACS' work within PHC nationwide 17-19.

The target audience of the research included Family Health teams (EqSF) professionals, face-to-face or remotely, in the Covid-19 pandemic: nurses, doctors, dentists, nursing, oral

health technicians, ACS, professionals from the Expanded Family Health Centers (Nasf), resident professionals, teachers of medical and multidisciplinary health residencies, and members of the ESF, in training during the pandemic.

We aimed to establish a wide range of investigative dimensions to conduct a multidimensional analysis of the work dynamics of the EqSF, consisting of seven thematic cores, namely: 1) Demographic and professional profile of the Family Health Strategy professionals; 2) Maintenance of routine services of the Family Health Strategy; 3) New flows and routines in the Family Health Strategy implemented during the Covid-19 pandemic; 4) Care provided to Covid-19 suspected cases, infected patients, and contacts; 5) Health promotion implemented by the EqSF; 6) Health surveillance implemented by the EqSF; and 7) Individual protection measures for professionals at home due to Covid-19.

The data collection questionnaire was designed considering the seven thematic cores, structured in seven blocks in the instrument, totaling 131 multiple-choice questions, with binary response options and a scale (Likert) with five alternatives. The response options 'other' or 'I don't know how to answer' were inserted in most questions. In some cases, a discursive option was available for optional detailing of the 'other' answer.

Data were collected from September 2020 to March 23, 2021, the second half living with Covid-19 in Brazil. The questionnaire access link and the Informed Consent Term (ICT) were made available on the websites and social networks of the institutions involved.

An excerpt of the national database was obtained for the elaboration of this paper to circumscribe only the results retrieved for Ceará and Paraíba, States with greater adherence to the research, which, together, total 962 respondents, or 55.22% of the total number of respondents (1,742), and 52.55% of the total number of municipalities in all regions that participated in the study (293).

A post-sample calculation of the representativeness of the sample of health professionals from Ceará and Paraíba was performed to ensure statistical inference, using the online calculator Comentto²⁰. We obtained 37,738 workers in Ceará and 19,477 in Paraíba, considering all the professionals working in Family Health Centers/PHC Units in the two States, per data from the National Registry of Health Establishments of the Ministry of Health²¹ (CNES/MS) for September 2020, the month of the collection. With a confidence interval of 95%, a sampling error of 5%, and considering a prevalence of different phenomena of 50%, the post-sample calculation resulted in 381 workers from Ceará and 377 from Paraíba. This excerpt of the referred States achieved samples above the minimum number for the established parameters, of 583 and 379, confirming the statistical representativeness.

This paper presents the first results of the national survey. Thus, data were analyzed using simple frequency and presented in double-entry tables, containing the absolute and relative frequencies for a group of variables, extracted from 25 questions in the questionnaire and related to the discussion on the longitudinality attribute in the ESF work process.

All documents related to the research were submitted and approved by the Research Ethics Committee within Fiocruz (protocol n° 4.129.145/20).

Results and discussion

Huston et al.²² evaluated the provision of PHC in six well-resourced countries, pointing out that Covid-19 has been exposing the weaknesses in health systems, and PHC components have been challenged in the effort to combat the disease in all countries. We could not identify how PHC would be maintained in a prolonged pandemic in the emergency plans of New Zealand,

Australia, Canada, the Netherlands, the United Kingdom, and the U.S. The scope and continuity of services were harmed since, besides people's fear of seeking care, believing in the possibility of overloading the health system, and social distancing measures, the pandemic treatment was prioritized over the non-Covid-19 conditions. Although positive results have been revealed when strengthening PHC's performance, the growing concern of the six countries is regarding the morbidity and mortality risk due to the impoundment of routine care via PHC.

Considering that all Brazilian municipalities were affected by Covid-19 and the history of population coverage, spread, linkage, and impact on the health of the Brazilian population, we assumed that the ESF is the priority device for people seeking care when symptomatic or affected by the disease and that it is responsible for including or adapting flows and routines of institutional services in the Unified Health System (SUS) for comprehensive care.

During a pandemic caused by an infectious disease with high morbidity and mortality, the priority territorial teams for access to health in the SUS must be 'prepared, protected and equipped', insofar as, as a result, the offered services will be enhanced to guarantee ESF's routine care to the assigned population and the individual and collective care in the potential Sars-CoV-2 infection.

Starfield²³ was adopted as a conceptual reference to analyze ESF's work process in the Covid-19 pandemic, taking the PHC attributes as strands of analysis for the national research. For this inaugural excerpt of the socialization of findings, we defined the initial analysis of the longitudinal linkage (longitudinality) proposed by Cunha and Giovanella²⁴ among the PHC attributes experienced in the ESF.

The authors^{24(1.038)} define it as the "therapeutic relationship established between

patient and PHC team professionals, which translates into the recognition and use of the UBS as a regular source of care over time". They also recognize it as a central characteristic of PHC in Brazil, and, thus, it should be duly pursued and evaluated. In their conceptualization, they present three dimensions in the composition of the attribute: "UBS as a regular source of PHC care, the establishment of a lasting bond (interpersonal relationship), and informational continuity"^{24(1,038)}. The results shared here are organized by correlating the variables to the conception of the first two dimensions.

The questionnaire obtained a total of 2,013 hits. Of these, 13 (0.6%) were disqualified for not accepting to participate, and 258 (12%) were excluded from the sample for not completing the information regarding the name of the state, the name of the municipality, or the name of the PHC Unit (UBS). After the exclusions, the questionnaires of 1,742 respondents were validated, covering completions and partial completions.

Given the universe of data collected in the national survey, in which all the states participated, Ceará and Paraíba were selected for this selection because they represented together 55.22% (962) of the respondents. Of this sample, 60.60% (583) are Ceará professionals, and 39.40% (379) are from Paraíba, representing 154 municipalities, 59.09% (91) from Ceará, and 40.91% (63) from Paraíba (*table 1*). The universe of municipalities

portrayed in this study represents 49.45% and 28.25% of the total number of municipalities in Ceará (184) and Paraíba (223). Respondents work in 386 UBS in Ceará and 184 in Paraíba. Ceará and Paraíba are the host states of three institutions promoting the research, a situation that may justify the greater adherence to research by professionals from both states.

The participation of female ACS workers (29%) and nurses (26.61%), females (81.19%), young and adults aged 18-39 years (61.85%), statutory public servants (48.75%), working in urban territories (58.63%) and with less than three years seniority in the current team (41.56%) prevailed. Although the percentage of statutory workers reaches 48.75% of the participants, the proportion of professionals who revealed fragile work relationships is high: 51.25% are contracted as outsourced, temporary contractors, or have other work relationships. As for the health responsibility of the work teams, 58.61% work in UBS with one EqSF; and 64.39% of the professionals are part of teams that are responsible for up to four thousand people, with the best situation in Paraíba (70.57%). As the ESF is a population and territorial linkage strategy, the frequency of professionals who were unable to answer how many people were assigned to their work teams was noteworthy, 12.89% in Ceará and 11.14% in Paraíba (table 1).

Table 1. Sociodemographic and professional profile and health responsibility of the participants. Ceará and Paraíba, 2nd half of 2020

Sociodemographic. professional. and health responsibility	Total	(n=962)	Ceará	(n=583)	Paraíba (n=379)		
profile		%	N	%	N	%	
Participating municipalities	154	100	91	59.09	63	40.91	
Participating professionals	962	100	583	60.60	379	39.40	
Sex (n=962)							
Female	781	81.19	459	78.73	322	84.96	
Male	180	18.71	123	21.10	57	15.04	
Preferred not to respond	1	0.10	1	0.17	0	0	
Age group (n=962)							
18-39 years	595	61.85	384	65.87	211	55.67	
40-59 years	344	35.76	190	32.59	154	40.63	
60 years and over	23	2.39	9	1.54	14	3.69	
		2.39		1.54	14	3.09	
Employment type (n=962)	460	40.75	202	40.54	107	40.00	
Statutory	469	48.75	283	48.54	186	49.08	
Temporary contract	349	36.28	208	35.68	141	37.2	
Outsourced	18	1.87	17	2.92	1	0.26	
Other work relationships	126	13.10	75	12.86	51	13.46	
Profession (n=962)							
Community Health Worker	279	29	155	26.59	124	32.72	
Nurse	256	26.61	161	27.62	95	25.07	
Doctor	130	13.51	81	13.89	49	12.93	
Dentist	81	8.42	57	9.78	24	6.33	
NASF professional	122	12.68	79	13.55	43	11.35	
Nursing technician	69	7.17	38	6.52	31	8.18	
Oral Health technician/assistant	25	2.60	12	2.06	13	3.43	
Seniority in the team (n=895)							
≤1 year	157	17.54	83	15.23	74	21.14	
≤1 Recruited due to Covid-19	16	1.79	11	2.02	5	1.43	
>1 ≤ 3 years	199	22.23	138	25.32	61	17.43	
>3 ≤ 5 years	145	16.20	99	18.17	46	13.14	
$>$ 5 \leq 10 years	116	12.96	78	14.31	38	10.86	
>10 years	262	29.27	136	24.95	126	36.00	
Current team territory covered (n=962)							
Urban	564	58.63	332	56.95	232	61.21	
Rural	277	28.79	179	30.70	98	25.86	
Both	121	12.58	72	12.35	49	12.93	
Number of users attaching to the current team (n=893)							
≤ 2.500	196	21.95	123	22.65	73	20.86	
> 2.500 ≤ 3.000	204	22.84	120	22.10	84	24.00	
> 3.000 ≤ 4.000	175	19.60	85	15.65	90	25.71	
> 4.000 ≤ 6.000	103	11.53	69	12.71	34	9.71	
> 6.000 ≤ 36.000	70	7.84	48	8.84	22	6.29	
Not clearly defined	36	4.03	28	5.16	8	2.29	
Did not respond	109	12.21	70	12.89	39	11.14	

Table 1. (cont.)							
Sociodemographic. professional. and health responsibility		(n=962)	Ceará ((n=583)	Paraíba (n=379)		
profile	N	%	N	%	N	%	
Number of EqSF per UBS (n=790)							
1 EqSF	463	58.61	283	58.59	180	58.63	
2 EqSF	145	18.35	100	20.70	45	14.66	
3 EqSF	61	7.72	43	8.90	18	5.86	
4 EqSF and over	121	15.32	57	11.80	64	20.85	

Mainly ACS adhered to this research, representing 26.59% and 32.72% of the participants in Ceará and Paraíba. This result was different from the one obtained in the survey 'Challenges of Primary Care in the face of the Covid-19 pandemic in the SUS'25, carried out in the first half of 2020, in which professionals from a thousand Brazilian municipalities participated, with a total of 1,908 ESF professionals, and only 9.8% were ACS. The percentage of nurses participating in the research mentioned above (36.4%) was higher than in this study (26.61%), which must be considered when interpreting the results for the ESF in the country. The sociodemographic profile of the participants in this study, primarily females aged 18-39 years, corroborates the results of other research that studied the sociodemographic profile of this universe of professionals.

Seniority in the current team, the employment relationship, user distribution by EqSF, the ascribed territory, the assessment of social conditions, and social actions standardized by the team to support the quarantine/distancing of suspected or positive user variables were considered analysis variables for the dimension 'establishing a lasting bond (interpersonal relationship)'. The study by Lima et al. ¹⁵ analyzed the achievement of PHC attributes in team practice from the perspective of professionals and users, comparing the results between Cycles 1 and 2 of the PMAQ-AB, which revealed that 43.7% of the professionals had been working in the team for more

than three years in Cycle 1, while only 38% did so in Cycle 2. In this study, 58.43% of the respondents had more than three years of experience in the current EqSF, and 48.75% of the participants were statutory. The analysis of these variables may indicate an improvement in the longitudinal relationship in the dimension on screen.

As for user distribution by EqSF, 19.37% are part of teams responsible for more than six thousand people, contrary to the provisions of PNAB7, which guides that the population enrolled by EqSF should be from two thousand to 3,500 people. This result is linked to the frequency of professionals who did not know how to answer how many people were linked to their work teams or answered 'there is no ascribed territory' (16.24%) (table 1) and points to the fragility of the dimension, since this is conceived as the "continuous interpersonal relationship between patient and caregiver, characterized by trust and responsibility"24(1,038), presupposing "a good health professional-patient relationship in an enrolled population, [...] and valuing the user experience and its subjectivity"24(1,038).

The ascription of the clientele with the ACS work is essential since meeting the needs and demands is strategic to ensure continuous care, as it favors adherence and the possible people recognition of the UBS as a place to be sought²⁶. Besides the authors' findings, the therapeutic interpersonal relationship is strengthened when users identify professionals concerned about their health situations,

making them have the UBS where the professionals work as a regular care source.

Mentioned by Cunha and Giovanella^{24(1,038)}, Caprara and Rodrigues state that a good doctor-patient relationship "involves trust, a standard of communication, consideration of the problems reported by the patient and their biopsychosocial aspects". In this sense, the findings revealed that 87.73% (n=383) and 84.58% (n=227) of Ceará and Paraíba professionals stated that they 'always or most of the time' assess the social conditions of suspected or positive users to follow quarantine/social distancing. Bousquat et al.25 observed weaknesses in implementing social support to face the pandemic. This study corroborates the authors25 since only 22.29% (n=610) of professionals from both states reported that 'standardized social actions were implemented by the initiative and planning of the EqSF in the territory to support the quarantine/social distancing of suspected or positive users.'

The municipalities where the participants' work was affected by Covid-19 according to 99.62% of the professionals (table 3); and regarding professional work in the pandemic, 92.54% of the participants were present from September 2020 to March 2021, reaching 94.36% of face-to-face work in Paraíba. Even with part of the workforce working remotely (4.7%) (table 2), the work situation of the teams concerning the routine activities of the ESF revealed that teams were immersed in an adaptation and innovation process, as 51.53% declared that they were 'performing routine activities, as before' and 31.42% revealed that they were 'prioritizing activities related to Covid-19 and performing routine activities, when demand arose' (table 2). The frequencies reveal a heterogeneous teamwork process while unveiling the transient and unique situation of Covid-19 in the respective territories and the need for a prompt response from the ESF compatible with the demand.

In the second half of the pandemic, only 7.46% (*table 2*) of the professionals were inactive, a frequency contributing to the

'interpersonal relationship' dimension of the longitudinal linkage. The permanence of professional work in the pandemic strengthens the trust and responsibility that characterize the attribute's interpersonal therapeutic relationship. However, we should confirm that a situation of professional dissatisfaction with working conditions can harm the interpersonal therapeutic relationship. The results related to the variables on working conditions will be described next: availability of Personal Protective Equipment (PPE), testing, access to training, and work structure, such diagnosis and care supplies and equipment.

The variables extracted from the guestions referring to the thematic cores 2) Maintenance of routine ESF services; 3) New flows and routines in the Strategy; and 4) Care provided to Covid-19 suspected cases, patients, and contacts were considered for the analysis of the ESF as a 'regular source of PHC care', a dimension that presupposes Starfield as mentioned by Cunha and Giovanella^{24(1,038)}, in which the "the population should recognize the UBS as a customary reference for meeting most of their health needs". Users' recognition of the UBS as a regular source of care in the pandemic situation, whether for routine situations or potential coronavirus infection, can be strengthened if they perceive that the teams are 'prepared, protected and equipped' for care.

According to the perception of 86.90% of the respondents, the territory users 'have the UBS as their first care reference for the possible illness by Covid-19' (table 2). In the second half of living with Covid-19, the 'inclusion of new people in the service' was perceived by 73.26% of professionals, with a higher frequency in Paraíba (75.54%). We could infer that some new users joined the SUS in the pandemic since 'new SUS Card registrations', the current SUS access document, occurred per 67.94% of the participants; 77.34% of professionals in Paraíba recorded this occurrence (table 2).

Table 2. Situation of the work process in the Family Health Strategy and perception of users' access to the PHC Unit and Family Health Strategy during the Covid-19 pandemic. Ceará and Paraíba, 2nd half of 2020

Work situation and user access to UBS/ESF during the		Total		Ceará		Paraíba		
pandemic period	N	%	N	%	N	%		
Current work situation in the ESF (n=871)								
Yes. face-to-face	806	92.54	488	91.39	318	94.36		
Yes. remotely	41	4.71	30	5.62	11	3.26		
No. reassigned to another service	24	2.76	16	3.00	8	2.37		
Situation of the work process regarding the routine activities	es of the E	SF (n=786	5)					
Performing routine activities. systematically. as before	405	51.53	265	54.64	140	46.51		
Performing routine activities only on demand	65	8.27	43	8.87	22	7.31		
Performing only activities related to Covid-19	11	1.40	9	1.86	2	0.66		
Prioritizing activities related to Covid-19 and performing routine activities (on demand)	247	31.42	129	26.60	118	39.20		
Other (specify)	58	7.38	39	8.04	19	6.31		
Users in the territory where EqSF operates have UBS as their	r first care	reference	for Covid-	-19 (n=733))			
Yes	637	86.90	395	86.81	242	87.05		
No	75	10.23	45	9.89	30	10.79		
Did not respond	21	2.86	15	3.30	6	2.16		
New users joined the service (n=733)								
Yes	537	73.26	327	71.87	210	75.54		
No	150	20.46	97	21.32	53	19.06		
Did not respond	46	6.28	31	6.81	15	5.40		
New SUS Cards were registered (n=733)								
Yes	498	67.94	283	62.20	215	77.34		
No	96	13.10	70	15.38	26	9.35		
Did not respond	139	18.96	102	22.42	37	13.31		
Users not registered with the SUS Card are attended to at	their UBS	(n=733)						
Yes. all were attended to *	488	66.58	291	63.96	197	70.86		
Yes. all were attended to. and SUS Card was prepared **	163	22.24	114	25.05	49	17.63		
Not attended to and oriented ***	43	5.87	27	5.93	16	5.76		
Did not respond	39	5.32	23	5.05	16	5.76		

^{*}Yes, all are attended to even without a SUS Card.

^{**}Yes, all are attended to, but SUS Card was prepared when treated.

^{***}Without the SUS Card and without the possibility of using it at the time of care; they are instructed to return with the documentation so that they are attended to.

The percentages described reinforce that the ESF is a SUS frontline device in the fight against Covid-19 and that, although they reveal positive numbers of its universality and the access and longitudinal linkage of the ESF, 5.87% of the professionals indicated that 'without the SUS Card and without the possibility of using it at the time of care, people were instructed to return with the documentation so that they could be seen' (table 2). This situation is a barrier to access to care in the severe context of morbidity and mortality by Covid-19.

Considering health as a right, the principles and guidelines of the SUS and the Health Care Networks, and the guidelines of the Primary Care Assistance Network, especially art. 2 and respective paragraphs of the PNAB⁷, we understand that administrative barriers to access can weaken the longitudinal linkage, translated as the "recognizing and using the UBS as a regular source of care over time"^{24(1,038)}. Care cannot be denied in the Covid-19 pandemic as it undermines the bond with professionals, the APS/ESF, and the SUS.

Table 3 displays the additions or adaptations by the EqSF to work in the Covid-19 pandemic. We identified the implementation

of new flows of people circulation in the UBS (80.76%), exclusive waiting rooms (70.40%), and wings for the care of patients with respiratory symptoms – inside (67.39%) or outside the UBS (23.60%) –, intensifying garbage collection (61.80%), and the cleaning routine of spaces and work surfaces (86.90%), fixing informative posters on the use of masks and hand hygiene (92.91%).

Attention was drawn to adding a new routine of continuous access to medication. Although home delivery of medicines is not an institutionalized routine in the PNAB and not prescribed as a routine in the ESF⁷, 35.20% of the respondents revealed that home delivery was performed; 40.88% was the prevalence in Ceará (*table 3*). Home delivery of medicines in a pandemic is a care practice that reveals the implementation of PHC principles and the ESF's cultural and social approach. There is a unique value of innovation in a State health system, implemented by a network with 63.62% population coverage²⁷.

The medication access routine was also adapted by the 'change in the prescription frequency' and 'change in the dispensing frequency', reaching higher percentages in Ceará, 76.92% and 64.62%, respectively (*table 3*).

Table 3. Covid-19 in the municipalities, incorporation of new flows in the PHC Unit, and new routines in the Family Health Strategy in the Covid-19 pandemic. Ceará and Paraíba, 2nd half of 2020

	Total (n=733)										
New flows and routines at UBS and ESF in the Covid-19		es	N	o	Did resp						
pandemic	N	%	N	%	N	%					
Covid-19 case in the covered municipality (n=782)	782	99.62	3	0.38	0	0					
Exclusive flows for respiratory symptoms	592	80.76	92	12.55	49	6.68					
Wing in the UBS or a reserved room for those with respiratory symptoms to wait for care	516	70.40	192	26.19	25	3.41					
Wing in the UBS or room reserved for the exclusive care of respiratory symptoms	494	67.39	209	28.51	30	4.09					
Exclusive wing for respiratory symptoms outside the UBS (Ex.: Stand. Tent. or Canvas)	173	23.60	534	72.85	26	3.55					

Table 3 (cont.)

	Total (n=733)									
New flows and routines at UBS and ESF in the Covid-19		es	N	lo	Did not respond					
pandemic	N	%	N	%	N	%				
Posters fixed at the UBS indicating the use of a mask or hand hygiene by all users	681	92.91	44	6	8	1.09				
Escalation of the UBS cleaning routine	637	86.90	77	10.50	19	2.59				
Change in the garbage collection routine of UBS spaces and offices	453	61.80	184	25.10	96	13.10				
Home delivery of medicines	258	35.20	371	50.61	104	14.19				
Change in the frequency of medication prescription	533	72.71	104	14.19	96	13.10				
Change in the frequency of drug dispensing	415	56.62	192	26.19	126	17.19				
Ceará (n=455)				-						
Covid-19 case in the covered municipality (n=483)	483	99.79	1	0.21	0	(
Exclusive flows for respiratory symptoms	368	80.88	59	12.97	28	6.15				
Wing in the UBS or a reserved room for those with respiratory symptoms to wait for care	312	68.57	127	27.91	16	3.52				
Wing in the UBS or room reserved for the exclusive care of respiratory symptoms	308	67.69	127	27.91	20	4.40				
Exclusive wing for respiratory symptoms outside the UBS (Ex.: Stand. Tent. or Canvas)	113	24.84	325	71.43	17	3.74				
Posters fixed at the UBS indicating the use of a mask or hand hygiene by all users	419	92.09	33	7.25	3	0.6				
Escalation of the UBS cleaning routine	400	87.91	43	9.45	12	2.6				
Change in the garbage collection routine of UBS spaces and offices	285	62.64	104	22.86	66	14.5				
Home delivery of medicines	186	40.88	205	45.05	64	14.0				
Change in the frequency of medication prescription	350	76.92	43	9.45	62	13.6				
Change in the frequency of drug dispensing	294	64.62	89	19.56	72	15.8				
Paraíba (n=278))									
Covid-19 case in the covered municipality (n=299)	299	99.34	2	0.66	0					
Exclusive flows for respiratory symptoms	224	80.58	33	11.87	21	7.5				
Wing in the UBS or a reserved room for those with respiratory symptoms to wait for care	204	73.38	65	23.38	9	3.2				
Wing in the UBS or room reserved for the exclusive care of respiratory symptoms	186	66.91	82	29.50	10	3.6				
Exclusive wing for respiratory symptoms outside the UBS (Ex.: Stand. Tent. or Canvas)	60	21.58	209	75.18	9	3.2				
Posters fixed at the UBS indicating the use of a mask or hand hygiene by all users	262	94.24	11	3.96	5	1.8				
Escalation of the UBS cleaning routine	237	85.25	34	12.23	7	2.5				
Change in the garbage collection routine of UBS spaces and offices	168	60.43	80	28.78	30	10.7				
Home delivery of medicines	72	25.90	166	59.71	40	14.3				
Change in the frequency of medication prescription	183	65.83	61	21.94	34	12.2				
Change in the frequency of drug dispensing	121	43.53	103	37.05	54	19.4				

The three variables that reveal the changes in the routine of access to medicines allow the analysis of the longitudinal linkage since, in the study that aimed to know the health practices to ensure longitudinality in the Federal District, Arcel and Souza²⁶ identified that the lack of medicines reported can weaken the unit as a usual care source by promoting conflicts and disbelief among the population vis-à-vis professionals, who must refer the population to other services.

We also understand that, in a pandemic context, it can help people linked to the service stop looking for it when in a situation of non- Covid-19 demands, centralizing care in the use of medicines and undermining care needs. A potential weakening of the UBS supply logistics can occur if the change in periodicities has not been planned in the SUS drug management authorities for the APS/ESF network. According to Bousquat et al.25, the responding managers stated the 'elaboration of municipal contingency plans' (96.8%), the 'analysis of the impact of the epidemic on PHC services in the municipality' (81.5%), the 'planning for the reorganization of PHC services due to the pandemic' (94.5%), the 'assessment of logistical and operational support needs for PHC' (89.2%) and the 'survey of supplies and equipment needs for the UBS' (96.2%), which leads us to infer that the supply of medication was considered in the contingency plans, assuming that medicines are essential care supplies in the ESF.

The extended prescription and dispensing periods may signal the EqSF's attempt to minimize the movement of people in the territories or the UBS and the protection of people with comorbidities vulnerable to Covid-19. It also contributes to the 'therapeutic interpersonal relationship' given its concept "continuous interpersonal relationship between patient and caregiver, characterized by trust and responsibility" 24(1,038).

PPE availability for ESF professionals is

unsatisfactory for the health context since this study and the study by Bousquat et al.25, carried out in the first half of 2020, revealed their continued insufficiency throughout the year. The percentages of 'sufficient number' in none of the recommended PPE reached the perception of 80% of the respondents. Low satisfaction with the amount of PPE was identified, especially for N95 masks (53.43%), goggles (54.45%), and disposable aprons (59.42%). Surgical masks were marked as 'insufficient' by 23.42% of professionals in Ceará and 25.58% of professionals in Paraíba (table 4). In three months of living with Covid-19, the professionals participating in the study by Bousquat et al.25 declared the PPE as 'insufficient' in the PHC since only 24% of the professionals indicated a set of PPE - face protection, eye protection, gloves, and apron - was 'always available' at the UBS. Professional dissatisfaction with working conditions weakens their exercise and, potentially, interpersonal relationships.

The emergence of a new illness situation requires the preparation of health professionals through training (remote, Distance Learning (DL), or face-to-face) for adequate occupational protection, surveillance, expanded clinic, and community focus in the assigned territories. According to the PNAB⁷, all spheres of government should

develop technical mechanisms and organizational strategies for the qualification of the workforce for management and health care, encourage and enable the training, permanent, and continuing education of professionals [art. 7/II].

Also, in the PNAB, chapter 5 (item XIX) addresses the PHC work process, where training and Continuing Health Education (EPS) are part of the teams' work process:

EPS is learning that occurs at work, where learning and teaching are incorporated into the daily life of organizations and work [...]

and must have a guaranteed space in the staff's workload and consider the qualification of all the multidisciplinary team [...]⁷⁽²⁹⁾.

In this regard, 21.85% of the participants declared that they had not undergone any training to address Covid-19, either by their means or induced by management. The percentage found indicates an evolution in training compared to the first half of 2020, in which 45.48% of the professionals in the Northeast had declared that they had not performed any training25. However, given the epidemiological profile of the disease and the role of the ESF, the frequency reveals ESF's fragility in coping with the pandemic. The management bodies would be responsible for organizing the work process, ensuring the workload for all professionals in the period to carry out training, as it is not enough to only offer courses.

With the ESF at the forefront of the pandemic, a situation confirmed by the findings provided so far, the teams should be prepared, protected, and adequately equipped for the adequate care of people linked to their health responsibility and potentially vulnerable to Covid-19 to strengthen the longitudinal linkage.

Infrared thermometer, oximeter, oxygen (table 4), essential supplies for the diagnosis and care of people suspected of Covid-19, obtained troubling percentages of response, respectively, 48.32%, 28.18%, and 61.17% when the percentages of 'insufficient number or unavailable at UBS' were added. In both States, the revealed situation weakens the care provided by the EqSF, since, if inadequately equipped, they cannot guarantee diagnosis and care for the people assisted. A similar unavailability situation was found in the study by Bousquat et al.25, especially in the North and Northeast regions for all items.

Table 4. Perception of the number of Personal Protective Equipment for professionals, hygiene routine in the PHC Unit, and the supplies for diagnosis/care of symptomatic/suspected Covid-19 cases. Ceará and Paraíba, 2nd half of 2020

								not
PPE. UBS Hygiene Routine and Suspected/	Suffi	cient	Insufficient		Unavailable		respond	
Symptomatic Diagnostic/Care Supplies	N	%	N	%	N	%	N	%
Cear	á (n=42	27)						
Personal Protective Equipment for professionals								
Surgical mask for professionals	280	65.57	100	23.42	29	6.79	18	4.22
N95 mask for professionals	229	53.63	142	33.26	38	8.90	18	4.22
Procedure gloves for professionals	333	77.99	62	14.52	12	2.81	20	4.68
Goggles for professionals	227	53.16	75	17.56	97	22.72	28	6.56
Face shield for professionals	283	66.28	82	19.20	44	10.30	18	4.22
Disposable/waterproof apron for professionals	248	58.08	123	28.81	33	7.73	23	5.39
Hygiene routine in the PHC Unit								
Soap for professional hand hygiene	339	79.39	54	12.65	19	4.45	15	3.51
Routine for cleaning and disinfecting frequently touched objects and surfaces	288	67.45	96	22.48	14	3.28	29	6.79
Intensified garbage collection routine from UBS spaces and offices	267	62.53	89	20.84	20	4.68	51	11.94

Table 4. (cont.) Did not Sufficient PPE. UBS Hygiene Routine and Suspected/ Insufficient Unavailable respond Symptomatic Diagnostic/Care Supplies Ν % Ν % N % Ν % Supplies for the diagnosis and care of suspected/symptomatic cases 18.97 Oxygen 92 21.55 52 12.18 202 47.31 81 Infrared thermometer 179 41.92 54 12.65 150 35.13 44 10.30 Oximeter 241 56.44 72 16.86 52 12.18 62 14.52 Communication infrastructure (n=535) Yes. good Yes. fair Yes. poor No Internet 191 35.70 231 43.18 39 7.29 74 13.83 Yes No Telephone 139 25.98 396 74.02 Paraíba (n=258) **Personal Protective Equipment for professionals** Surgical mask for professionals 180 69.77 66 25.58 7 2.71 5 1.94 N95 mask for professionals 137 53.10 58 22.48 56 21.71 7 2.71 3 7 Procedure gloves for professionals 212 82.17 36 13.95 1.16 2.71 Goggles for professionals 146 56.59 42 16.28 54 20.93 6.20 16 Face shield for professionals 200 77.52 34 13.18 17 6.59 7 2.71 Disposable/waterproof apron for professionals 159 61.63 79 30.62 12 8 4.65 3.10 Hygiene routine in the PHC Unit Soap for professional hand hygiene 209 81.01 10.08 5.43 9 3.49 26 14 Routine for cleaning and disinfecting frequently 176 68.22 64 24.81 9 3.49 9 3.49 touched objects and surfaces 67.44 174 49 18.99 9 3.49 Intensified garbage collection routine from UBS spaces 26 10.08 and offices Supplies for the diagnosis and care of suspected/symptomatic cases Oxygen 59 22.87 14 5.43 151 58.53 34 13.18 Infrared thermometer 109 42.25 25 9.69 102 39.53 22 8.53 Oximeter 162 62.79 31 12.02 38 14.73 27 10.47 Communication infrastructure (n=343) Yes. good Yes. fair Yes. poor No Internet 162 47.23 103 30.03 18 5.25 60 17.49

Yes

52.48

180

No

47.52

163

Source: Own elaboration.

Telephone

A similar scarcity situation is identified in the possibility of carrying out laboratory tests in the UBS also in the block of supplies to address Covid-19. The rapid test (IgG/ IgM) was identified as 'sometimes, rarely, or never performed' by 33.58% of professionals, reaching 35% in Ceará. The percentage of completion as 'sometimes, rarely, or never' for the RT-PCR test was higher, 57.93% of the respondents. In Paraíba, the 'sometimes, rarely, or never' possibility to perform RT-PCR at UBS reached 67.30% in the second half of living with Covid-19. In the Northeast, after three months of the pandemic, 69.3% of PHC professionals declared 'no access' to the RT-PCR23 test to diagnose Covid-19 in their working UBS. Both studies reveal the continuing shortage of tests in PHC throughout the first year of the pandemic.

On May 29, 2020, the Ministry of Health published Ordinance No. 1.44528 establishing the Care Reference Centers for Coping with Covid-19, which, among their attributes, must test the population at risk, a situation that may have contributed to the low spread testing supply in the UBS. The regulation for the financial transfer necessary for the implementation classifies the municipalities into three types, which shows that each one of them only had one device, with only the value of the financial incentive varying depending on the population size. Although the ordinance regulates (Art. 3) that these devices must act complementarily to PHC, it may have contributed to relocating the population to reference centers to the detriment of access to their territorially assigned UBS.

The findings show that the EqSF implemented several team-territory communication strategies. In this regard, we identified that communication via telephone and internet was essential for access to information, monitoring Covid-19 patients, and ensuring the continuity of care for people linked to other ESF services. However, less than half of the respondents declared 'good quality internet' in the UBS, 35.70% in Ceará, and 47.23% in Paraíba. The telephone was declared 'non-existent' in the UBS by 74.02% of professionals in Ceará and 47.52% in Paraíba (table 4). Bousquat et al.25 found that only 40% of the professionals reported having 'good internet' at the UBS in the first half of 2020.

Observing the work situation ('prepared, protected, and equipped' EqSF), we identified the maintenance of the routine services implemented by the ESF, understanding that the maintenance contributes to the strengthening of ESF's longitudinal linkage in a pandemic. In table 5, we observe that, among the 24 services listed in the electronic questionnaire, none achieved 100% maintenance, indicating the potential risk to public health due to partial maintenance or suspension of services routinely provided to the linked population. The services with the highest percentage of 'maintenance' were prenatal care (91.38%), drug dispensing (84.16%), immunization (86.82%), individual procedures - removal of stitches, dressings, medication administration (80.10%), rapid testing for sexually transmitted infections (65.27%), and walk-in demand care - not Covid-19 (60.46%), in both states.

Table 5. Continuity of routine actions and services of the Family Health Strategy during the Covid-19 pandemic. Ceará and Paraíba, 2nd half of 2020

			Par	tially			Nor	n-ESF		
		tained	main	tained	Susp	ended	rou	ıtine	Did not	respond
Actions and Routine Services at the ESF	N	%	N	%	N	%	N	%	N	%
	Ceará (n=485)								
Prenatal care	453	93.40	23	4.74	4	0.82	0	0	5	1.03
Drug dispensing	453	93.40	19	3.92	2	0.41	4	0.82	7	1.44
Immunization	427	88.04	41	8.45	8	1.65	0	0	9	1.86
Individual procedures (removal of stitches, dressing, and administration of medication)	379	78.14	83	17.11	11	2.27	5	1.03	7	1.44
Rapid testing for Sexually Transmitted Infections - STIs (syphilis. \mbox{HIV} and $\mbox{HV})$	312	64.33	114	23.51	28	5.77	9	1.86	22	4.54
Care to walk-in demand (non-Covid-19 demand)	294	60.62	153	31.55	28	5.77	1	0.21	9	1.86
Care to people with hypertension and diabetes	279	57.53	166	34.23	29	5.98	4	0.82	7	1.44
Surveillance of infectious diseases in the territory (active search. registration. follow-up of tuberculosis. Hansen's disease. and others)	277	57.11	129	26.60	45	9.28	9	1.86	25	5.15
Follow-up of people with mental health problems	264	54.43	154	31.75	23	4.74	21	4.33	23	4.74
Follow-up of people with other chronic diseases	260	53.61	187	38.56	27	5.57	4	0.82	7	1.44
Continuing care for older adults	235	48.45	200	41.24	42	8.66	4	0.82	4	0.82
Sexual and reproductive planning	232	47.84	157	32.37	57	11.75	13	2.68	26	5.36
Collection of laboratory tests	207	42.68	121	24.95	34	7.01	95	19.59	28	5.77
Team meeting to evaluate and plan the work process	206	42.47	182	37.53	69	14.23	17	3.51	11	2.27
Prevention of breast and cervical cancer	204	42.06	124	25.57	125	25.77	12	2.47	20	4.12
Childcare	198	40.82	135	27.84	135	27.84	5	1.03	12	2.47
Mental health promotion	192	39.59	169	34.85	66	13.61	32	6.60	26	5.36
Home visits	152	31.34	186	38.35	137	28.25	6	1.24	4	0.82
Home delivery of medicines	149	30.72	71	14.64	42	8.66	166	34.23	57	11.75
Oral health	135	27.84	200	41.24	113	23.30	26	5.36	11	2.27
Individual educational actions for general health promotion	131	27.01	153	31.55	169	34.85	14	2.89	18	3.71
Intersectoral activities	63	12.99	153	31.55	165	34.02	39	8.04	65	13.40
Integrative and Complementary Health Practices (Pics)	62	12.78	114	23.51	91	18.76	120	24.74	98	20.21
Community participation activities (health promotion)	56	11.55	128	26.39	269	55.46	21	4.33	11	2.27
Therapeutic groups	37	7.63	67	13.81	288	59.38	65	13.40	28	5.77
	Paraíba	(n=304)								
Prenatal care	268	88.16	28	9.21	1	0.33	2	0.66	5	1.64
Drug dispensing	258	84.87	24	7.89	8	2.63	7	2.30	7	2.30
Immunization	253	83.22	36	11.84	5	1.64	3	0.99	7	2.30
Individual procedures (removal of stitches, dressing, and administration of medication) $ \\$	211	69.41	21	6.91	6	1.97	47	15.46	19	6.25
Rapid testing for Sexually Transmitted Infections - STIs (syphilis. $\mbox{H{\sc IV}}$ and $\mbox{H{\sc IV}}$	203	66.78	72	23.68	12	3.95	3	0.99	14	4.61
Care to walk-in demand (non-Covid-19 demand)	183	60.20	109	35.86	3	0.99	2	0.66	7	2.30
Care to people with hypertension and diabetes	190	62.50	82	26.97	10	3.29	8	2.63	14	4.61

Table 5. (cont.)

		1	Par	tially			No	n-ESF		
		tained	maintained		Suspended		routine		Did not respond	
Actions and Routine Services at the ESF	N	%	N	%	N	%	N	%	N	%
Surveillance of infectious diseases in the territory (active search. registration. follow-up of tuberculosis. Hansen's disease. and others)	170	55.92	112	36.84	12	3.95	7	2.30	3	0.99
Follow-up of people with mental health problems	170	55.92	87	28.62	24	7.89	4	1.32	19	6.25
Follow-up of people with other chronic diseases	167	54.93	116	38.16	8	2.63	5	1.64	8	2.63
Continuing care for older adults	152	50	105	34.54	22	7.24	9	2.96	16	5.26
Sexual and reproductive planning	151	49.67	107	35.20	31	10.20	5	1.64	10	3.29
Collection of laboratory tests	150	49.34	126	41.45	17	5.59	6	1.97	5	1.64
Team meeting to evaluate and plan the work process	146	48.03	112	36.84	36	11.84	6	1.97	4	1.32
Prevention of breast and cervical cancer	127	41.78	60	19.74	18	5.92	81	26.64	18	5.92
Childcare	123	40.46	113	37.17	34	11.18	22	7.24	12	3.95
Mental health promotion	117	38.49	115	37.83	59	19.41	6	1.97	7	2.30
Home visits	102	33.55	147	48.36	49	16.12	3	0.99	3	0.99
Home delivery of medicines	88	28.95	151	49.67	50	16.45	10	3.29	5	1.64
Oral health	85	27.96	119	39.14	82	26.97	9	2.96	9	2.96
Individual educational actions for general health promotion	49	16.12	71	23.36	168	55.26	4	1.32	12	3.95
Intersectoral activities	47	15.46	45	14.80	25	8.22	152	50	35	11.51
Integrative and Complementary Health Practices (Pics)	41	13.49	93	30.59	109	35.86	23	7.57	38	12.50
Community participation activities (health promotion)	34	11.18	74	24.34	75	24.67	67	22.04	54	17.76
Therapeutic groups	23	7.57	57	18.75	174	57.24	29	9.54	21	6.91

'Home delivery of medicines', 'Integrative and Complementary Health Practices (Pics)', and 'laboratory tests collection' were services considered 'not routine in the ESF' by 40.30%, 23.70 %, and 22.31%, respectively, by the study participants.

Corroborating the social distancing in the territories, the services that require the interaction of subjects had the lowest percentage of maintenance, namely, Pics (13.18%), community participation activities (12.17%), and 'therapeutic groups' (13.31%), respectively, Mendes²⁹ draws attention to the fact that the disrupted monitoring of chronic conditions will aggravate diseases, complications, and preventable deaths. Bousquat et al.²⁵ affirm that the set of care continuity issues by routine PHC services and their adaptation point to

a concern with preserving users' health and linked priority groups. The heterogeneous maintenance of routine UBS services during the first year of the pandemic revealed by Bousquat et al.²⁶ and in this study shows that services were gradually and heterogeneously resumed in a reduced or adapted form.

Final considerations

This paper aimed to reflect on the longitudinal linkage of care as an essential attribute of PHC implemented through the ESF, especially analyzing the implementation of practices in the Covid-19 pandemic, which contribute to two of its dimensions: 'UBS as a regular source of care' and 'establishing a lasting bond/

interpersonal relationship'. The dimension 'informational continuity', while included in the ESF_COVID-19_Brasil, was not analyzed in this paper and is one of its limitations.

Considering that all Brazilian municipalities were affected by Covid-19, the history of population coverage, spread, and longitudinal linkage of the ESF, strengthens the thesis that it is the priority device of people seeking care when symptomatic or affected by the disease and is, therefore, located in the Brazilian front line of fighting the disease.

The longitudinal linkage has been showing its weaknesses and strengths in living with Covid-19 to receive suspected cases or infected people and continue caring for those already linked to the other health responsibility services of the EqSF. We identified weaknesses in what are called 'prepared, protected, and equipped teams' for coping with the disease and maintaining routine ESF services.

We noted the access of new users to the service during the pandemic, increased or adapted flows and routines, social practices, professional training, acquisition of PPE and specific supplies, and an attempt to maintain routine ESF services. However, despite the efforts of managers and workers in the family health network, the second half of living with the disease displayed inadequate population size, employment instability, lack of professional training, PPE, tests, and supplies for diagnosis, care, and communication with the assigned population and low prevalence of routine services for individual and collective health.

The ESF should be urgently grounded and strengthened, seeking effective PHC attributes. Thus, PHC should be appreciated in a tripartite way by achieving the competencies of the management bodies, especially during the potential social and clinical repercussions of living with the disease and post-illness situations. Health is territorially based, established in everyday life. Furthermore, the locus of ESF action lies in the daily life of the territories. The EqSFs each take care of 'a bunch of people and a stretch of land over time'.

Advancing the right to health in Brazil requires placing PHC attributes at the core of comprehensive health planning, as recommended by the SUS, extrapolating the limits of individualized and programmatic action to recognize and work on the social determinants of health. Otherwise, the legacy of Covid-19 in Brazil will be strengthening the biomedical, medical-centered, medicalizing, and hospital-centric hegemony. 'Prepared, protected, and equipped' teams strengthen ESF's longitudinal linkage.

Collaborators

Frota AC (0000-0003-3944-2263)* and Barreto ICHC (0000-0001-8447-3654)* contributed substantially to the design, planning, analysis, and interpretation of data, elaboration, and critical review of the preliminary version and participated in the approval of the final version of the manuscript. Carvalho ALB (0000-0003-0328-6588)* contributed substantially to the planning, analysis, and interpretation of data, elaboration, and critical review of the preliminary version and participated in the approval of the final version of the manuscript. Ouverney ALM (0000-0002-8581-3777)*, Andrade LOM (0000-0002-3335-0619)* and Machado NMS (0000-0001-9334-9305)* contributed substantially to the planning, analysis, and interpretation of data.

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