Revista O Mundo da Saúde

DOI: 10.15343/0104-7809.202347e14272022I

Quality of Primary Health Care During the COVID-19 Pandemic: Evaluation by Users Affected by the Disease

Murilo César do Nascimento[1,2*] Simone Albino da Silva[1] Anne Andrade Matiazi de Oliveira[1]
Heriederson Sávio Dias Moura[2] Juliana Soares Tenório de Araújo[2] Felipe Mendes Delpino[2,3] Debora de Almeida Soares[2]
Inês Santos Estevinho Fronteira[4] Namie Okino Sawada[1] Ricardo Alexandre Arcêncio[2]

[1]Escola de Enfermagem da Universidade Federal de Alfenas – UNIFAL-MG. Alfenas/MG, Brasil.
[2]Escola de Enfermagem de Ribeirão Preto da Universidade de São Paulo – EERP-USP. Ribeirão Preto/SP, Brasil.
[3]Universidade Federal Pelotas – UFPel. Pelotas/RS, Brasil.
[4]Instituto de Higiene e Medicina Tropical. Universidade Nova de Lisboa – UNL. Lisboa, Portugal.
E-mail: murilo.nascimento@unifal-mg.edu.br

Abstract

The coronavirus disease pandemic greatly impacted society, creating unprecedented challenges for science, healthcare systems, and Primary Health Care, which were quickly charged with diversified responses to face this public health emergency. The objective of this study was to evaluate the quality of PHC from the perspective of people affected by COVID-19. This was a cross-sectional study with cases of COVID-19 in a Brazilian municipality. We used an electronic questionnaire with sociodemographic and clinical characteristics (of our own elaboration) and the *PCATool*-Brazil Instrument – for adult patients (reduced version), through the KoBoToolbox resource. After a pre-test and pilot study, data collection took place between January 11 and October 5, 2021. Descriptive statistics were used, calculating the General PHC Score – 0 to 10 (mean and standard deviations). 91 participants evaluated the PHC characteristics/components. The overall PHC score (mean) was 4.4 (SD=1.9). This low overall PHC score obtained indicates weaknesses in the quality of this level of healthcare, in the first six months of the pandemic in 2020. Such a low PHC quality score is unprecedented. It appears that the negative result in the studied municipality reflects the impact of COVID-19 and the strategies adopted to face the pandemic triggered by SARS-CoV-2 in Brazil and in the world.

Keywords: Health Assessment. Health Care. Coronavirus. Patients. Surveys and Questionnaires.

INTRODUCTION

The coronavirus disease pandemic greatly impacted society[1,2,3,4], creating unprecedented challenges for science and for healthcare systems that were quickly charged with diversified responses to face this public health emergency. With this, healthcare systems and services around the world needed to reorganize themselves in every aspect[5].

In Brazil, initial actions against the pandemic were directed towards restructuring specialized care, especially for the most serious cases (increasing the number of beds, intensive care units, and mechanical respirators, for example). However, the reorganization of other health care levels, such as Primary Health Care (PHC), was also imperative. Specifi-

Revista O Mundo da Saúde

DOI: 10.15343/0104-7809.202347e14272022I

cally, PHC had and is still facing the challenges of the pandemic, as well as maintaining a regular and qualified provision of its activities and services[5,6].

For PHC to advance robustly, incorporating the role of coping with COVID-19 and attention to the various clinical complications, persistent symptoms, and possible post-infection sequelae with SARS-CoV-2, it crucial to strengthen its features[7], namely: access at first contact; longitudinality, comprehensiveness and coordination of care, cultural competence; and family and community guidance[8]. In this context, it should be noted that the measurement of the presence and extent of such components have been used in Brazil and in the world as important indicators of PHC performance and quality[9,10,11,12].

There are several evaluative studies addressing the quality of Primary Health Care (PHC) services, both from the perspective of users and health professionals in different scenarios[13,14,15]. There is also a high and growing number of scientific productions contemplating the disease caused by the coronavirus and the recent pandemic that originated with the spread of SARS-CoV-2[16,17]. However, the literature is still incipient with regards to assessments of the presence and extent of PHC characteristics, according to individuals with a history of SARS-CoV-2 infection in the community.

This problem and gap motivated this study in order to answer the following research questions: what is the evaluation that users affected by COVID-19 have of the quality of Primary Health Care during the pandemic? Initially, users were asked about their association, that is, about the existence of a service/professionals they seek when they get sick or when they need health advice, who know them as a person and who are more responsible for their healthcare.

In the sequence, the following specific aspects of PHC characteristics were also considered: priority given to the service in the face of a new health problem; obtaining quick assistance by telephone when the PHC center is open; existence of difficulty in obtaining medical attention; attendance by the same professional; feeling comfortable in consultations; awareness of the service and health professionals of the most important problems for the user; intention to change healthcare service; occurrence of consultation referral to a specialist by the physician; information from the doctor to the specialist about the reason for the consultation; physician's awareness of the results of the consultation with the specialist; physician's interest in the quality of care with the specialist; availability of medical records at consultations.

Finally, care was taken to receive counseling on mental health problems as well as on: how to stop smoking, the changes that occur with aging, healthy eating, physical exercise, and fall prevention; verification of medications in use; user inclusion in treatment planning and individual or family care; organization of family meetings; and participation in patient surveys on service quality. In this context, the objective of this study was to evaluate the quality of PHC from the perspective of people affected by COVID-19.

Revista O Mundo da Saúde

DOI: 10.15343/0104-7809.202347e14272022I

METHODS

Study design

This was a cross-sectional study, carried out with cases of COVID-19 confirmed during the pandemic by the new coronavirus in a Brazilian municipality. This cross-sectional approach originated from the cohort research entitled "Study of confirmed cases of COVID-19 in Minas Gerais".

Study setting

The study scenario was a Brazilian municipality located in the southern macro-region of the State of Minas Gerais, which in March 2020 had an estimated population of 79,996 inhabitants, with 19 Family Health Strategy (FHS) teams in primary healthcare services, 18 of which are urban and one rural, providing coverage of 81.94% by the FHS. Still at this care level, there were three Primary Health Care (PHC) centers with primary healthcare teams, totaling population coverage at 92.25%[18].

As support services for Primary Health Care, there is a drug distribution center, for access to controlled psychotropic drugs, special milk and diapers, and thirteen pharmacies attached to the FHS, as well as three associated clinical analysis laboratories. The network of specialized and hospital care services is vast and includes services contracted and insured by the Unified Health System[19].

Population and Sample

The reference population for the study consisted of the 1,923 initial cases of infection by SARS-CoV-2, confirmed from March 15 to October 26, 2020, identified from the compulsory notification records of the Epidemiological Surveillance Sector of the city of interest. The list of contacts, containing the name, age group, telephone number, and home address of the people to be invited to the study, was made available by the Coordination of Health Surveillance after a formal request by the researchers to the local Municipal Health Department.

Inclusion criteria were: confirmed cases of COVID-19 by laboratory methods (RT-PCR - molecular biology, detectable SARS-CoV-2, swab; Immunological - reagent: IgM, IgA and/or IgG - ELISA, Immunochromatography/test fast/antibodies, ECLIA; Antigen research - reagent: SARS-CoV-2/Immunochromatography/antigen), individuals aged 20 years or older, residing in the city of Alfenas, in their own home, and with a clinical outcome of cured disease. The initial sample excluded 110 individuals residing in an institution for the elderly, 189 individuals aged less than 20 years old, 21 individuals with no registered age, 35 clinical outcomes of death from the disease, and two duplicate records, totaling 357 exclusions.

Stratified and proportional random sampling was then considered for the sample calculation and random selection of study participants, with age group and hospitalization as strata. The sample was calculated considering the 1,566 records of people who remained eligible after exclusions. 20% of losses due to refusals or other causes were contemplated. Thus, it was estimated that a sample of 428 participants was necessary.

Of the 428 confirmed cases of COVID-19 allocated for interviews, 211 were lost for the following reasons: Wrong address and/or phone number (33.6% of losses); refusals, after 3 or more attempts (33.6%); three or more unsuccessful contact attempts (18.1%); self-reported false positives (4.3%); address in ru-

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

ral areas (4.3%); person unable to answer the interview (1.4%); and deaths (4.7% of losses).

It was observed that 41.9% of the 217 people affected and followed-up indicated their affiliation with Primary Health Care services, which made them eligible to assess the quality of PHC. Thus, the final number of participants for this cross-sectional study was 91 people. The breakdown of eligibility from the reference population to the final participants of this cross-sectional approach can be seen in Figure 1.

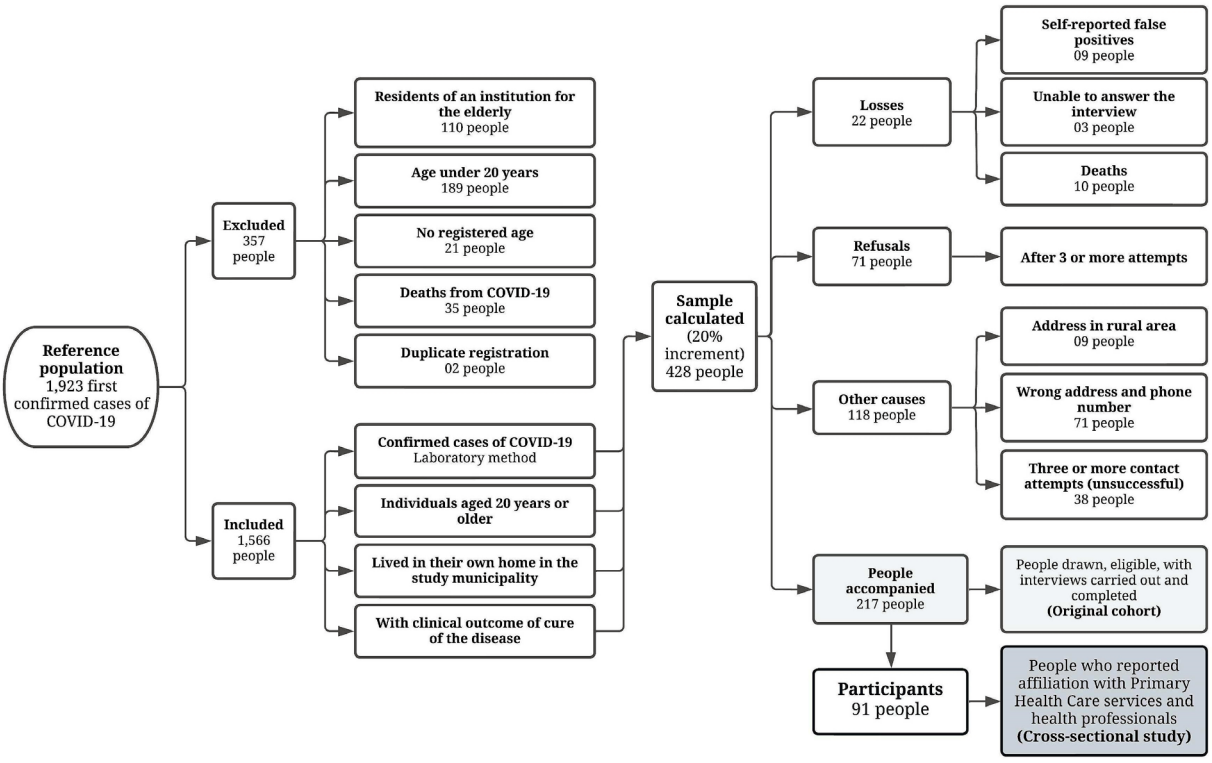

Figure 1 - Participant eligibility flowchart, Alfenas, MG, 2021.

Collection instruments

An electronic questionnaire for offline collection in the field (supplementary material) was used, containing the Informed Consent Form (ICF), an instrument for sociodemographic and clinical characterization (26 questions) of our own elaboration, and the PCATool-Brasil Instrument – for adult patients (abbreviated version, 25 items)[20], reproduced in full in a section of the applied electronic questionnaire. Validated in Brazil, the PCATool is intended to assess the existence and extent of PHC characteristics in the practice of healthcare services[21,22].

The abbreviated version of the PCATool-Brasil (adults) consists of 25 items divided into 10 components related to PHC characteristics, namely: Association with a Health Care Service or Doctor or Nurse; First Contact Access – Use; First Contact Access – Accessibility; Longitudinality; Coordination - Care Integration; Coordination – Information Systems; Comprehensiveness - Available Services; Comprehensiveness - Services Provided; Family Guidance; and Community Guidance[22].

The instrument's items are answered using

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

the following Likert scale containing the options: (4) Definitely yes; (3) Probably yes; (2) Probably not; (1) Certainly not; and (9) I don't know/I don't remember. Values ranging from 1 to 4, resulting from each response, are used to calculate the General PHC Score, which is obtained by averaging the responses of all items in the instrument. The General Score (GS) can also be transformed into values ranging from 0 to 10. The interpretation of the values obtained is that the highest values (mean GS ≥ 3 or High Score ≥ 6.6 from 0-10) are characteristic of more services directed at PHC and represent the presence and extension of the characteristics of this level of healthcare. Thus, the short version of the PHC assessment tool for adult patients has been disseminated by Brazilian researchers and has been well received by the scientific community in several countries around the world[22].

Data collection

After carrying out the pre-test stages of the form that contained all the collection instruments, and the pilot study, field work was carried out to collect data in the period between January 11 and October 5, 2021. Two strategies were used to apply the questionnaires: 1) home visits for face-to-face interviews; and 2) telephone contacts, based on circulation restrictions imposed in the State of Minas Gerais.

Interviewers were divided into randomly selected pairs and used tablets or cell phones during home visits, as well as computers to collect data remotely. Consent regarding participation in the study was obtained through a printed and signed ICF, as well as through audio recordings and screen prints during phone calls and contact via messaging application.

Both for the pre-test and for data collection, the interviewers had the help of a list of addresses containing the name and age group of the people to be invited to the study, as well as maps prepared by the executing team containing the households located using Google My Maps and a division of the urban area into eight visitation regions, which contributed to the planning of the interviewers' displacement strategies for field activity.

Data processing

The information collected during face-to-face and remote interviews was automatically transferred via electronic questionnaire to the KoBoToolbox[23] platform where it was stored. Subsequently, the data were exported to an electronic spreadsheet prepared in the Microsoft Excel program, version 15.0 and, subsequently, transferred to the Stata software, version 13.1. The database was subjected to internal consistency tests (assessment of information quality and pattern of missing data). Once this phase was concluded, the final stage of data management was reserved for the definitive categorization of variables.

Statistical analyses: descriptive and multivariate

The study population was characterized according to sociodemographic factors and aspects related to the evaluated characteristics/components of the PHC. For the description, absolute (N) and relative (%) distribution indicators were used, medians (50th percentile), mean values and respective standard deviations. Regarding the calculation of the General PHC Score, addressed in the abbreviated version of PCATool-Brasil (adults), the following formula was used:

$$\text{Score 0 to 10: } \frac{\text{Score obtained} - \text{Lowest value on scale}}{\text{Highest value on scale} - \text{Lowest value on scale}} \times 10$$

$$\frac{\text{Score obtained} - 1}{4-1} \times 10$$

In this calculation, the 'Score obtained' corresponds to the score originally on a scale of 1 to 4 that was to be transform into values from 0 to 1022.

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

Ethical aspects

This study was approved by the Research Ethics Committee of the proposing institution (CAAE no. 34746620.6.0000.5142 and Opinion no. 4.317.149, of October 02, 2020). All aspects of Ethics in Research with Human Subjects were followed.

RESULTS

Ninety-one participants evaluated Primary Health Care system. The mean age was 60.0 years old (SD=14.0), with the youngest respondent being 24.0 years old and the oldest being 91.0 years old. As for gender, 56.0% were female and 44.0% were male. Visited users had an average family income of R$ 2,174.40 (SD=1704.40). Regarding time spent attending school(s), an average of 6.8 years (SD=5.0) of formal schooling was observed. Concerning the services evaluated, 86 respondents (94.5%) referred to different Family Health Strategy Teams (FHS) and five (5.5%) mentioned a Primary Care Center without an FHS team.

Regarding affiliation with a health service or doctor or nurse, the answers to the following questions were analyzed: A1. Is there a health service/doctor/nurse where you usually go when you are sick or need advice about your health? A2. Is there a health service/doctor/nurse that knows you best as a person? A3. Is there a health service/doctor/nurse who is more responsible for your health care? Thus, the responses to items A1, A2, and A3 led to the following distribution of respondents regarding the classification of association: grade 1 = 09 (9.9%); grade 2 = 11 (12.1%); grade 3 = 13 (14.3%); and grade 4 = 58 (63.7%).

Table 1 shows the distribution of responses to the other 23 items of the instrument (transcribed in the caption), corresponding to the characteristics and components of PHC.

Table 1 - Distribution of responses to PCATool items on PHC quality, Alfenas, MG, 2021.

PHC Characteristics (Components)	Codes / Items / Questions	(4) Absolutely yes	(3) Probably yes	(2) Probably not – (9) I don't know/I don't remember	(1) Definitely not
		N (%)	N (%)	N (%)	N (%)
First contact (Usage)	B2	51 (56)	23 (25.3)	06 (6.6)	11 (12.1)
First Contact (Accessibility)	C4	27 (29.7)	17 (18.7)	17 (18.7)	30 (33.0)
	C11*	44 (48.4)	13 (14.3)	16 (17.6)	18 (19.8)
Longitudinality (Longitudinality)	D1	34 (37.4)	23 (25.3)	17 (18.7)	17 (18.7)
	D6	60 (65.9)	26 (28.6)	04 (4.4)	01 (1.1)
	D9	44 (48.4)	30 (33.0)	14 (15.4)	03 (3.3)
	D14*	48 (52.8)	12 (13.2)	14 (15.4)	17 (18.7)

to be continued...

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

... continuation table 1

Atributos (Componentes) da APS	Códigos / Itens / Perguntas	(4) Com certeza sim	(3) Provavelmente sim	(2) Provavelmente não – (9) Não sei/ Não lembro	(1) Com certeza não
		N (%)	N (%)	N (%)	N (%)
Coordination (Information Systems)	E2	15 (50.0)	09 (30.0)	03 (10)	03 (10.0)
	E6**	09 (30.0)	07 (23.3)	12 (40.0)	02 (6.7)
	E7	12 (40.0)	06 (20.0)	09 (30.0)	03 (10.0)
	E9**	12 (40.0)	06 (20.0)	11 (36.7)	01 (3.3)
Comprehensiveness (Services available)	F3	21 (23.1)	15 (16.5)	44 (48.4)	11 (12.1)
Comprehensiveness (Services provided)	G9	21 (23.1)	11 (12.1)	14 (15.4)	45 (49.5)
	G17	18 (19.8)	12 (13.2)	15 (16.5)	46 (50.6)
	G20	24 (26.4)	10 (11.0)	09 (9.9)	48 (52.8)
Family Focus (Family Guidance)	H1	43 (47.3)	13 (14.3)	10 (11.0)	25 (27.5)
	H5	45 (49.5)	14 (15.4)	09 (9.9)	23 (25.3)
	H7	47 (51.7)	17 (18.7)	06 (6.6)	21 (23.1)
	H11	33 (36.3)	09 (9.9)	14 (15.4)	35 (38.5)
Community Orientation (Community Guidance)	I1	18 (19.8)	22 (24.2)	12 (13.2)	39 (42.9)
	I3	33 (36.3)	27 (29.7)	26 (28.6)	05 (5.5)
	J4	19 (20.9)	12 (13.2)	23 (25.3)	37 (40.7)

B2. *When you have a new health problem, do you go to the "health service/doctor/nurse" before going to another health service? C4. When the "health service" is open, can you get quick advice over the phone or via virtual communication tool (e.g. whatsapp, telegram, wechat, skype, hangout, email) if you need it?* ***C11.*** *Is it difficult for you to get medical attention at the "health service" when you think it is necessary?* ***D1.*** *When you go to the "health service", is it the same doctor or nurse who sees you every time?* ***D6.*** *Do you feel comfortable sharing your concerns or problems with the "doctor/nurse"?* ***D9.*** *Does the "doctor/nurse" know which issues are most important to you and your family?* ***D14.*** *If it were very easy, would you switch from the "health service" to another health service?* ***E2.*** *Did the "doctor/nurse" suggest (indicate, refer) that you go see this specialist or the specialized service?* ***E6.*** *Did the "doctor/nurse" send any information to the specialist about the reason for this consultation (with the specialist or at the specialized service)?* ***E7.*** *Does the "doctor/nurse" know the results of the consultation with the specialist or in the specialized service?* ***E9.*** *Did the "doctor/nurse" seem interested in the quality of care you received in the consultation with the specialist or in the specialized service (asked if you were treated well or poorly)?* ***F3.*** *If you wanted, could you read (consult) your medical record at/with the "health service/doctor/nurse"?* ***G9.*** *Counseling for mental health issues (e.g. anxiety, depression).* ***G17.*** *Advice about smoking (e.g. how to stop smoking).* ***G20.*** *Counseling about changes that happen with aging (e.g. memory impairment, risk of falling).* ***H1.*** *Guidelines on healthy eating, good hygiene, and adequate sleep (getting enough sleep).* ***H5.*** *Guidance on physical exercises appropriate for you.* ***H7.*** *Check and discuss the medications you are using.* ***H11.*** *How to prevent falls.* ***I1.*** *Does the "doctor/nurse" ask for your ideas and opinions (what do you think) when planning treatment and care for you or someone in your family?* ***I3.*** *Would the "doctor/nurse" meet with members of your family if you felt it was necessary?* ***J4.*** *Patient surveys to see if services are meeting (satisfying) people's needs.*
N = 91 (100%); C11 and D14*: inverted scores; from E2** to E9**, N = 30 (100%).*

Item E1 was deleted because it is a question that identifies whether adult patients had a medical appointment with a specialist or in a specialized service.

From these records, the PHC quality/performance score was calculated, considering the General PHC Score – 0 to 10 (mean and standard deviations) = 4.4 (1.9). The value obtained shows a low PHC score, according to the assessment of people affected by COVID-19.

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

DISCUSSION

This work made it possible to evaluate the quality of the Primary Health Care service from the perspective of people affected by COVID-19 and presents, as the main result, a low overall PHC score. This finding means and indicates weaknesses in the quality of that local level of care during the first half of the pandemic in 2020. Such a low PHC quality score is unprecedented. It appears that the negative result in the studied municipality reflects the impact of COVID-19 and the strategies adopted to face the pandemic triggered by SARS-CoV-2 in Brazil and in the world.

In times of COVID-19, the PHC service was faced with the challenge of confronting the pandemic and maintaining the regular and qualified provision of its activities and services[5,6]. The failure observed in "attempts to confront the pandemic centered on individual hospital care warns of the need for a more regional, community, and home-based approach, and the need to activate the PHC, strongly and fully, with integrated health surveillance actions, with all its potential"[5,24].

The measurement of incipient scores referring to the performance of PHC at the local regional level has been recurrent. In a cross-sectional study carried out with 1,027 rural workers residing in municipalities belonging to a regional health superintendence in the south of Minas Gerais, Brazil, whose PHC is governed by the Family Health Strategy model, only one degree of association presented a high score. The item "comprehensiveness: available services" was the one that recorded the lowest average in the evaluation. The low general scores presented did not differ in the comparison between the PHC assessment by men and women studied[25].

In another cross-sectional evaluative study, carried out with 527 adult users, 330 guardians of children aged up to two years old and 34 health professionals from the Family Health Strategy in the micro-region of Alfenas, Minas Gerais, Brazil, the PHC presented traits with high scores in the perspective of doctors and nurses (7.40), with the exception of Access to First Contact, and low scores, according to the evaluation of adult users - 5.92 - and those responsible for children - 6.21[13,14].

In most of the studies involving the PCA-Tool instrument, there is a tendency for better evaluation by health professionals when compared to users' perceptions. However, in a survey of 41 Family Health nurses from municipalities in Minas Gerais, although workers had satisfactorily evaluated most PHC characteristics, a low score was identified in care coordination. Therefore, the authors indicated the need to improve the referral and counter-referral system, implementation of partnerships, elaboration of care protocols, and permanent education for the strengthening of Health Care Networks[26].

Divergent data was found in another evaluative study on comprehensiveness in Primary Health Care by elderly users in the city of Alfenas, MG, where there was a high number of positive evaluations, and 57% of participants reporting receiving guidance on changes that occur with aging[27]. In the same municipal scenario, however, addressing another vulnerable population in terms of access to health services, 228 men were visited in their homes in areas designated by the FHS for a study on the evaluation of the quality of Primary Health Care. At the time of the interviews, 54.82% reported a higher degree of association, however, 80.70% evaluated Primary Care as of low quality[28].

Due to the pandemic of interest, there was a mobilization of the Brazilian government

DOI: 10.15343/0104-7809.202347e14272022I

with support actions and local strengthening of the essential characteristics of PHC to face COVID-19 in Brazil. With access in mind, the following actions were developed: Teleconsultation (TeleSUS), Health on the Spot, Hiring 7,500 doctors for PHC, and 50 million new PHC user registrations. With regards to Longitudinality, the Telehealth Platform was used to maintain care for chronic diseases. Concerning Comprehensiveness, clinical protocols, massive testing for symptomatic patients and the general population, and teleconsultation for health professionals were encouraged. As for the Care Coordination, the main COVID-19 action was to monitor cases via TeleSUS[29].

Although the promotion and institutionalization of the aforementioned activities were important responses by the federal government to the health crisis, the Brazilian Unified Health System (UHS) is decentralized, and the actions are operationalized in the municipalities, under the coordination of state management. In a country of continental dimensions, with social inequalities and health inequalities in the same proportions as its territorial extension, the reality of implementing the fight against the COVID-19 pandemic varies greatly from state to state and from city to city. In this context, the observed distancing of the federal level from its role as national leader of the UHS, delegating efforts to face the pandemic to states and municipalities, culminated in serious consequences for the population's access to healthcare[30].

Attention to COVID-19 needed to address the needs in the different stages of the disease and across the entire spectrum of severity, in a line of care that involved everything from monitoring mild cases in home isolation, with guidance on managing symptoms and for early identification of warning signs, until admission to intensive care units (ICU) and rehabilitation after hospital discharge[31]. However, as in the first year of the pandemic there was no vaccine to reduce the incidence of severe cases, and these had a greater impact on the Unified Health System, and even though it is organized in healthcare networks, there was no role played by PHC at this stage, in the sense of care and available services, since this level of care did not have the capacity to act on the lethality of serious cases.

Therefore, in the municipality in question, although the population recognized the Primary Care service as the first place to seek care for this new health problem, the reception for the diagnosis and monitoring of suspected and confirmed cases was initially performed through the flu emergency room and health surveillance center, and not by the PHC/FHS teams, as recommended by the Ministry of Health[32]. What was being done in countries like Italy was replicated, concentrating the investment of resources of all kinds in hospital care[33].

The first level of healthcare was responsible for supporting and encouraging home isolation of suspected and confirmed cases with mild evolution and maintaining routine care for other demands. Therefore, the good result of longitudinality and care coordination pointed out in this study stands out. Although the Ministry of Health exceptionally regulated the use of telemedicine as a strategy to combat the spread of COVID-19[34], the necessary structure for this approach to be carried out was not within the reality for most Brazilian municipalities.

It should be noted that home visits were suspended for a long period, reducing the possibilities for action by Community Health Agents, who are important allies in raising awareness of the population to combat stigma related to the disease, in disseminating correct information on the prevention of COVID-19, in the fight against fake news, and in support of educational activities in the territory[5].

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

Despite the full potential of PHC, its history of implementation and coverage, the results found here are closely related to political decisions about the healthcare system in the recent pre-pandemic period. Since 2017, measures to weaken the FHS, such as the reduction of community health agents, flexibility in the workload of professionals, extinction of the Expanded Nucleus of Family Health and Primary Care (ENFH-PC), loss of professionals, disincentives to a territorial approach with the new financing model of Primary Care based on the number of those registered, weakening the community focus, among others, all represent important constraints for an adequate performance of PHC in facing the pandemic[35].

During the cross-sectional study from which this cross-sectional research was developed, there were many losses, refusals and problems regarding the location data of confirmed cases of COVID-19 used for access and invitation to the target audience of interest. Circulation restrictions, physical distancing and social isolation prudently oriented as preventive measures in the context of the COVID-19 pandemic have greatly contributed to the challenges inherent in advancing fieldwork. In addition, 41.9% of the people affected and monitored indicated associations with Primary Health Care services and were eligible for the assessment of the quality of the proposed PHC.

Taken together, these conditions and situations resulted in a total number of participants below initial expectations. This reduced number of final participants who evaluated Primary Health Care, compared to the high coverage of PHC in the municipality where the study was conducted, constituted a weakness of the present work. Another limitation to be considered refers to the PCATool instrument itself, which presents, as one of its characteristics, a homogeneous and undifferentiated distribution of weights for the calculated points referring to the characteristics of the PHC[36]. Therefore, when recognizing the infeasibility of generalizing the results, due attention to the external validity of the findings is suggested.

CONCLUSION

The new coronavirus, in fact, exposed the need to reorganize healthcare systems, mainly at the PHC level, with a view to providing increasingly timely responses to the new demands for healthcare. Data from the current study advance knowledge by demonstrating that, compared to previous research available in the literature, referring to the municipality and region of interest, such low scores had never been measured in relation to the presence and extent of the characteristics of the local PHC, in the pre-COVID-19 pandemic scenario. Therefore, the relevance of studies of this nature is reinforced and the continuity of evaluative, regular, and systematic approaches on the quality of PHC during and after such a public health emergency is suggested.

FINANCING: This research was funded by the Dean of Research and Graduate Studies at the Federal University of Alfenas, MG, No. 002/2020.

ACKNOWLEDGMENTS: We thank PhD Isabel Cristina Martins de Freitas for her methodological and statistical support.

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

Author statement CRediT

Conceptualization: Nascimento, MC; Silva, SA; Sawada, NO. Methodology: Nascimento, MC; Silva, SA; Delpino, FM. Validation: Moura, HSD; Araújo, JST; Delpino, FM; Soares, DA; Fronteira, ISE; Arcêncio, RA. Statistical analysis: Nascimento, MC; Delpino, FM. Formal analysis: Nascimento, MC; Silva, SA; Sawada, NO; Arcêncio, RA. Investigation: Nascimento, MC; Silva, SA; Oliveira, AAM; Sawada, NO. Resources: Sawada, NO; Arcêncio, RA. Writing-original draft preparation: Nascimento, MC; Silva, SA; Oliveira, AAM; Moura, HSD; Araújo, JST; Delpino, FM; Soares, DA; Fronteira, ISE. Writing-review and editing: Nascimento, MC; Silva, SA; Oliveira, AAM; Moura, HSD; Araújo, JST; Delpino, FM; Soares, DA; Fronteira, ISE; Sawada, NO; Arcêncio, RA. Visualization: Nascimento, MC; Silva, SA; Oliveira, AAM; Moura, HSD; Araújo, JST; Delpino, FM; Soares, DA; Fronteira, ISE; Sawada, NO; Arcêncio, RA. Supervision: Sawada, NO; Silva, AS; Arcêncio, RA. Project administration: Sawada, NO.

All authors have read and agreed to the published version of the manuscript.

REFERENCES

1. Castro MC, Gurzenda S, Turra CM, Kim S, Andrasfay T, Goldman N. Reduction in the 2020 Life Expectancy in Brazil after COVID-19. Nat Med [revista em Internet] 2021. [acesso 17 junho de 2022]; 27: 1629–1635. Disponível em: https://doi.org/10.1038/s41591-021-01437-z
2. Backes DAP, Arias MI, Storopoli JE, Ramos HR. Os efeitos da pandemia de Covid-19 sobre as organizações: um olhar para o futuro. Rev Ibero-Americana Estratégia [revista em Internet] 2020 [acesso 05 de agosto de 2022]; 9(4):1–10. Disponível em: https://doi.org/10.5585/riae.v19i4.18987
3. Cruz RM, et al. COVID-19: Emergência e Impactos na Saúde e no Trabalho. Rev Psicol Organ Trab [revista em Internet] 2020 [acesso 05 de agosto de 2022]; 20:1–2. Disponível em: http://dx.doi.org/10.17652/rpot/2020.2.editorial
4. Malta DC, et al. A pandemia da COVID-19 e as mudanças no estilo de vida dos brasileiros adultos: um estudo transversal, 2020. Epidemiol e Serviços Saúde [revista em Internet] 2020 [acesso 13 de setembro de 2022]; 29(4). Disponível em: https://doi.org/10.1590/S1679-49742020000400026
5. Medina MG, Giovanella L, Bousquat A, Mendonça MHM de, Aquino R. Atenção primária à saúde em tempos de COVID-19: o que fazer? Cad Saude Publica [revista em Internet] 2020 [acesso 05 de agosto de 2022]; 36(8). Disponível em: https://doi.org/10.1590/0102-311X00149720
6. Machado CV, Pereira AMM, Freitas AMM. Políticas e sistemas de saúde em tempos de pandemia: nove países, muitas lições. Rio de Janeiro: Observatório Covid-19 Fiocruz/Fiocruz; 2022.
7. Cirino FMSB, Aragão JB, Meyer G, Campos DS, Gryschek ALDFPL, Nichiata LYI. Desafios da atenção primária no contexto da COVID-19. Rev Bras Med Família e Comunidade [revista em Internet] 2021 [acesso 05 de agosto de 2022]; 16(43):2665. Disponível em: https://doi.org/10.5712/rbmfc16(43)2665
8. Starfield B. Atenção primária: equilíbrio entre necessidades de saúde, serviços e tecnologia. Brasília: UNESCO/Ministério da Saúde; 2002.
9. Santos NCC de B, Vaz EMC, Nogueira JA, Toso BRG de O, Collet N, Reichert AP da S. Presença e extensão dos atributos de atenção primária à saúde da criança em distintos modelos de cuidado. Cad Saude Publica [revista em Internet] 2018 [acesso 03 de junho de 2022]; 34(1). Disponível em: https://doi.org/10.1590/0102-311X00014216
10. Silva GS, Alves CRL. Avaliação do grau de implantação dos atributos da atenção primária à saúde como indicador da qualidade da assistência prestada às crianças. Cad Saude Publica [revista em Internet] 2019 [acesso 03 de junho de 2022]; 35(2). Disponível em: https://doi.org/10.1590/0102-311X00095418
11. D'Avila OP, Pinto LF da S, Hauser L, Gonçalves MR, Harzheim E. O uso do Primary Care Assessment Tool (PCAT): uma revisão integrativa e proposta de atualização. Cien Saude Colet [revista em Internet] 2017 [acesso 17 de junho de 2022]; 22(3):855–65. Disponível em: https://doi.org/10.1590/1413-81232017223.03312016
12. Starfield B, Cassady C, Nanda J, Forrest CB, Berk R. Consumer experiences and provider perceptions of the quality of primary care: implications for managed care. J Fam Pract [revista em Internet] 1998 [acesso 17 de junho de 2022]; 46(3):216–26. Disponível em: https://pubmed.ncbi.nlm.nih.gov/9519019/
13. Silva SA da, Nogueira DA, Paraizo CM da S, Fracolli LA. Assessment of primary health care: health professionals' perspective. Rev da Esc Enferm da USP [revista em Internet] 2014 [acesso 03 de junho de 2022]; 48(spe):122–8. Disponível em: https://doi.org/10.1590/S0080-623420140000600018
14. Silva SA da, Baitelo TC, Fracolli LA. Primary Health Care Evaluation: the view of clients and professionals about the Family Health Strategy. Rev Lat Am Enfermagem [revista em Internet] 2015 [acesso 10 de setembro de 2022]; 23(5):979–87. Disponível em: https://doi.org/10.1590/0104-1169.0489.2639
15. Costa MA, Alves MTSS de B e, Branco RMPC, Castro WEC, Ramos CAM. Avaliação da qualidade dos serviços de Atenção Primária à Saúde no município de São José de Ribamar, Maranhão, Brasil. Interface - Comun Saúde, Educ [revista em Internet] 2020 [acesso 17 de junho de 2022]; 24(suppl 1). Disponível em: https://doi.org/10.1590/Interface.190628
16. Alves do Nascimento D, Gomes Vasconcelos I. Mapeamento da produção científica sobre COVID-19. Interam J Med Heal [revista em Internet] 2020 [acesso 10 de setembro de 2022]; 3. Disponível em: https://doi.org/10.31005/iajmh.v3i0.134
17. Mota DM, Ferreira PJG, Leal LF. Produção científica sobre a COVID-19 no Brasil: uma revisão de escopo. Vigilância Sanitária em Debate Soc Ciência Tecnol [revista em Internet] 2020 [acesso 10 de setembro de 2022]; 8(3):114–24. Disponível em: https://doi.org/10.22239/2317-269x.01599
18. Brasil. e-Gestor AB. Informação e Gestão da Atenção Básica. Brasília: Ministério da Saúde. Secretaria de Atenção Primária

DOI: 10.15343/0104-7809.202347e14272022I

à Saúde – SAPS; 2021 [Atualizado em: 2022 Jul 29; acesso 29 de julho de 2022]. Disponível em: https://egestorab.saude.gov.br/paginas/acessoPublico/relatorios/relatoriosPublicos.xhtml
19. Prefeitura Municipal de Alfenas. Alfenas 2017-2022. Alfenas: Prefeitura Municipal de Alfenas; 2022 [Atualizado em: 2022 Jul 29; acesso 29 de julho de 2022]. Disponível em: http://www.alfenas.mg.gov.br/
20. Oliveira MMC de, Harzheim E, Riboldi J, Duncan BB. PCATool-Adulto-Brasil: uma versão reduzida. Rev Bras Med Família e Comunidade [revista em Internet] 2013 [acesso 10 de setembro de 2022]; 8(9):256–63. Disponível em: https://doi.org/10.5712/rbmfc8(29)823
21. Brasil. Ministério da Saúde. Secretaria de Atenção em Saúde. Departamento de Atenção Básica. Manual do instrumento de avaliação da atenção primária à saúde: Primary Care Assessment Tool PCATool. Brasília: Ministério da Saúde; 2010.
22. Brasil. Ministério da Saúde. Secretaria de Atenção Primária à Saúde. Departamento de Saúde da Família. Manual do Instrumento de Avaliação da Atenção Primária à Saúde : PCATool-Brasil – 2020. Brasília: Ministério da Saúde; 2020.
23. Harvard Humanitarian Initiative. KoBoToolbox; 2022 [acesso 29 de julho de 2022]. Disponível em: https://www.kobotoolbox.org/
24. Prado NM de BL, et al. Ações de vigilância à saúde integradas à Atenção Primária à Saúde diante da pandemia da COVID-19: contribuições para o debate. Cien Saude Colet [revista em Internet] 2021 [acesso 10 de setembro de 2022]; 26(7):2843–57. https://doi.org/10.1590/1413-81232021267.00582021
25. Silvério ACP, Martins I, Nogueira DA, Mello MAS, Loyola EAC de, Graciano MM de C. Assessment of Primary Health Care for rural workers exposed to pesticides. Rev Saude Publica [revista em Internet] 2020 [acesso 05 de agosto de 2022]; 54:9. Disponível em: https://doi.org/10.11606/s1518-8787.2020054001455
26. Nogueira TCP, Oliveira LFA de, Nogueira DA, Sanches RS, Silva SA da, Nascimento MC do. Saúde da família e coordenação do cuidado: avaliação de trabalhadores do Sistema Único de Saúde. Brazilian J Dev [revista em Internet] 2021 [acesso 10 de setembro de 2022]; 7(2):12093–107. Disponível em: https://doi.org/10.34117/bjdv7n2-029
27. Rocha VCLG, Pereira DS, Brito GEG de, Pereira MJ, Silva SLA da. Avaliação da integralidade na Atenção Primária à Saúde pelo usuário idoso: estudo transversal. Rev APS [revista em Internet] 2021 [acesso 23 de junho de 2022]; 24(2):238–55. Disponível em: https://doi.org/10.34019/1809-8363.2021.v24.33312
28. Pinto G dos R, et al. Avaliação da qualidade da Atenção Primária à Saúde segundo homens de um município mineiro. Res Soc Dev [revista em Internet] 2021 [acesso 20 de junho de 2022]; 10(6):e31410615733. Disponível em: https://doi.org/10.33448/rsd-v10i6.15733
29. Harzheim E, et al. Ações federais para apoio e fortalecimento local no combate ao COVID-19: a Atenção Primária à Saúde (APS) no assento do condutor. Cien Saude Colet [revista em Internet] 2020 [acesso 07 de junho de 2022]; 25(suppl 1):2493–7. Disponível em:https://doi.org/10.1590/1413-81232020256.1.11492020
30. Vieira FS, Servo LMS. Covid-19 e coordenação federativa no Brasil: consequências da dissonância federal para a resposta à pandemia. Saúde em Debate. 2020;44(spe4):100-113. Disponível em: https://doi.org/10.1590/0103-11042020E406
31. Daumas RP, Silva GA e, Tasca R, Leite I da C, Brasil P, Greco DB, et al. O papel da atenção primária na rede de atenção à saúde no Brasil: limites e possibilidades no enfrentamento da COVID-19. Cad Saude Publica [revista em Internet] 2020 [acesso 07 de junho de 2022]; 36(6). Disponível em: https://doi.org/10.1590/0102-311X00104120
32. Ministério da Saúde. Manejo clínico do coronavírus (COVID-19) na Atenção Primária à Saúde. 9ª ed, Brasília: Secretaria de Atenção Primária à Saúde (SAPS); 2020.
33. Nacoti. M, et al. At the epicenter of the Covid-19 pandemic and humanitarian crises in Italy: changing perspectives on preparation and mitigation. NEJM Catalyst [revista em Internet] 2022 [acesso 29 de junho de 2022]. Disponível em: https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0080
34. Brasil. Portaria MS/GM no 467, de 20 de março de 2020. Dispõe, em caráter excepcional e temporário, sobre as ações de Telemedicina, com o objetivo de regulamentar e operacionalizar as medidas de enfrentamento da emergência de saúde pública de importância internacional previstas no art. 3º da Lei nº 13.979, de 6 de fevereiro de 2020, decorrente da epidemia de COVID-19. Diário Oficial da União. De março de 2020. Disponível em: https://www.in.gov.br/en/web/dou/-/portaria-n-467-de-20-de-marco-de-2020-249312996
35. Giovanella L, Franco CM, Almeida PF de. Política Nacional de Atenção Básica: para onde vamos? Cien Saude Colet [revista em Internet] 2020 [acesso 05 de agosto de 2022]; 25(4):1475–82. Disponível em: https://doi.org/10.1590/1413-81232020254.01842020
36. Castro RCL de, Knauth DR, Harzheim E, Hauser L, Duncan BB. Avaliação da qualidade da atenção primária pelos profissionais de saúde: comparação entre diferentes tipos de serviços. Cad Saude Publica [revista em Internet] 2012 [acesso 03 de março de 2023]; 28(9):1772-1784. Disponível em: https://doi.org/10.1590/S0102-311X2012000900015

Submitted: 26 october 2022.
Accepted: 13 march 2023.
Published: 25 april 2023.

Revista O Mundo da Saúde

DOI: 10.15343/0104-7809.202347e14272022I

Supplementary material

FS. Follow-up study of confirmed cases of COVID-19 in Minas Gerais

INITIAL REGISTRATION AND INFORMED CONSENT FORM

First name of interviewer/researcher

_____

City of collection

(City referring to field work)

- ◯ 0. Alfenas - MG
- ◯ 1. Belo Horizonte - MG
- ◯ 2. Divinópolis - MG
- ◯ 3. Juiz de Fora - MG

Group / Sample

- ◯ Group A - Independent sample 1 (individuals with a history of hospitalization due to COVID-19)
- ◯ Group B - Independent sample 2 (individuals without a history of hospitalization due to COVID-19)

Moment / Collections Strategy

- ◯ T0 (face-to-face / at home / by telephone interview)
- ◯ T1 (telephone interview)
- ◯ T2 (telephone interview)

Interview Location

(Not required anymore after new T0, T1, and T2)

_____

latitude (x.y °)

_____

longitude (x.y °)

_____

altitude (m)

_____

accuracy (m)

_____

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

Date of visit / phone call

(Interview)

yyyy-mm-dd

Participant name

(In full)

Photo of the Informed Consent Form signed by the participant

Using the tablet to photograph the ICF during the home visit at T0; or to photograph the cellphone screen with the phone number dialed, audio recording code or Whatsapp conversation which may be considered as consent at T1 and T2)

Click here to upload the file. (<5MB)

You are being invited to participate, as a volunteer, in the research "Follow-up study of confirmed cases of COVID-19 in Minas Gerais".

Your participation is not mandatory, and you may withdraw your consent at any time. Your refusal will not harm your relationship with the researcher or with UNIFAL-MG. You will receive a copy of this term containing the telephone number and address of the main researcher for any future clarification about your participation in the study. Researcher in charge (supervisor): Namie Okino Sawada. Address: Rua Gabriel Monteiro da Silva, 700. TELEPHONE: (35) 3701-9477. GENERAL OBJECTIVE: To analyze associated factors such as health conditions, social problems, social isolation, incidence of complications, death, and impaired quality of life in confirmed cases of COVID-19. BACKGROUND: Little is known about the consequences of COVID-19 -19 in the health and disease conditions of different population groups, including short-, medium- and long-term complications, effects on pre-existing morbidities, access to and use of healthcare services, including for other purposes, during the pandemic. It is a new disease that, as it progresses, generates adaptations and repercussions in social relationships, behavior patterns, and life habits that need to be known. STUDY PROCEDURES: after signing the informed consent form, five questionnaires will be used to assess aspects of quality of life, level of anxiety, impact of the disease, issues of social support, impact of the event, perception of individual risk, family risk, community risk, and levels of satisfaction with healthcare services. There will be three interviews, lasting approximately 1 hour and a half, the first meeting will be face-to-face, and the 6-month and 11-month follow-ups will be done by telephone. RISKS AND DISCOMFORTS: The methodology adopted in this study may offer risks such as emotional discomfort, embarrassment with the questions in the questionnaires, physical fatigue when answering the nine questionnaires. If you feel tired during your participation, please let us know, as we will take short breaks during the interview. If you feel any emotional discomfort, please let us know, as we will provide means to avoid and/or reduce any damage you may experience. If the discomfort persists, we will refer you to a SUS psychologist. It is worth remembering that you can leave the study in any phase, if you want, without the need for justification. BENEFIT5: This study will provide data to the healthcare team about the short-term effects of COVID-19 infection helping with healthcare planning for COVID-19 patients as well as for the development of Public Policies to care for this population. COST/REIMBURSEMENT TO THE PARTICIPANT: You will incur no cost to participate in this research and will not receive any financial advantage. RESEARCH CONFIDENTIALITY: The data obtained during this study will be analyzed in a confidential way, we will maintain the anonymity of your identity, however the results obtained in the research will be publicly published. I declare that I read the information contained in this Informed Consent Form, and that I was duly informed by the researchers of the procedures that will be used, risks and discomforts, benefits, cost/reimbursement of participants, confidentiality of the research, and use of the telephone for the interviews. I was assured that I could withdraw consent at any time during the study without any penalty or loss of life. I further declare that I have received a copy of this Informed Consent Form. I can consult the responsible researchers or the CEP-UNIFAL-MG, with address at the Federal University of Alfenas, Rua Gabriel Monteiro da Silva, 700, Centro, CEP - 37130-000, Phone: (35) 3701-9477, by e-mail: comite.etica@unifal-mg.edu.br whenever I deem it necessary to obtain information on clarification about the research project and about my participation in it. The procedures adopted in this study comply with the Ethical Criteria for Research with Human Beings, according to Resolution No. 466/12 The research was approved by the Research Ethics Committee of UNIFAL-MG Responsible Researcher: Prof. Dr. Namie Okino Sawada.

- ◯ Yes, I agree to participate in the survey
- ◯ No, I do not agree to participate in the study

INSTRUMENT FOR SOCIODEMOGRAPHIC AND CLINICAL CHARACTERIZATION

1. Sex

- ◯ 0. Female
- ◯ 1. Male

2. Date of Birth

yyyy-mm-dd

Revista O Mundo da Saúde

DOI: 10.15343/0104-7809.202347e14272022I

3. Marital Status

- ◯ 0. No partner
- ◯ 1. With partner

4. Completed years of formal schooling
(N of years attended school)

_____

5. Religion

- ◯ 0. Catholic
- ◯ 1. Evangelical
- ◯ 2. Spiritist
- ◯ 3. Other
- ◯ 4. I have none

6. Practitioner

- ◯ 0. Yes
- ◯ 1. No

7. Neighborhood where you live
(Name of the participant's neighborhood of residence)

_____

8. Number of rooms in the residence
(Only n of rooms and bedrooms)

_____

9. Number of people living in the residence
(Including the interviewee)

_____

10. Who do you live with?

- ◯ 0. I live alone
- ◯ 1. I live with spouse or companion
- ◯ 2. I live with spouse and children
- ◯ 3. I live with my children
- ◯ 4. I live with other people (not family)
- ◯ 5. I live with my parents
- ◯ 6. Other responses

10.1. Describe who the interviewee lives with if the previous answer was option "6. Other responses"

_____

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

11. Relationship with family members

- ◯ 0. Excellent
- ◯ 1. Good
- ◯ 2. Regular
- ◯ 3. Bad

12. Receives follow-up from a caregiver

- ◯ 0. Yes
- ◯ 1. No

13. Work situation

- ◯ 0. Worked within the last 3 months
- ◯ 1. Unemployed for the last 3 months
- ◯ 2. Student
- ◯ 3. Retired
- ◯ 4. On leave (Health leave)
- ◯ 5. Does not work

14. Field of activity

(Sector / work area)

_____

15. Main Income Source

(Work, retirement/pension, scholarship, aid, etc.)

_____

16. Approximate Monthly Income

*(No. in reais - R$ - of family income. *Attention: if it is not possible to obtain this data, type 00 in item 16 and justify the reason in the following question 16.1)*

_____

16.1. In case it is not possible to obtain data concerning family income, indicate the reason:

- ◯ 0. The person did not know how to respond
- ◯ 1. The person preferred not to response
- ◯ 2. Other reason

17. Number of people who depend on this income

_____

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

PCATOOL-BRASIL- FOR ADULT PATIENTS (REDUCED VERSION)

» Affiliation with a Healthcare Service or Doctor or Nurse

A1. Is there a healthcare service/doctor/nurse where you usually go when you are sick or need advice about your health?

- ◯ No
- ◯ Yes

A1.1 What is the name of this healthcare service or professional?

_____

A1.2. What is the address of this healthcare service or professional?

_____

A2. Is there a healthcare service/doctor/nurse that knows you best as a person?

- ◯ No
- ◯ Yes, the same healthcare service/doctor/nurse referred to in item A1
- ◯ Yes, a different healthcare service/doctor/nurse referred to in item A1

A2.1 What is the name of this healthcare service or professional?

_____

A2.2. What is the address of this healthcare service or professional?

_____

A3. Is there a healthcare service/doctor/nurse that is mostly responsible for your health care?

- ◯ No
- ◯ Yes, the same referred to in items A1 and A2
- ◯ Yes, only the one referred to in item A1
- ◯ Yes, only the one referred to in item A2
- ◯ Yes, different from the ones referred to in items A1 and A2

A3.1 What is the name of this healthcare service or professional?

_____

A3.2. What is the address of this healthcare service or professional?

_____

A4. What is the name of the healthcare service/doctor/nurse that you saw at your most recent medical or nursing appointment (for adults).

_____

A4.1 What is the address of the healthcare service/doctor/nurse that you saw at your most recent medical or nursing appointment (for adults).

_____

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

A5. Write the name of the healthcare service/doctor/nurse identified as a reference for adult healthcare, and clarify to the interviewee that, starting from this point onwards, all questions will be about this healthcare service or professional.

_____

» First Contact Access - Usage

B2. When you have a new health problem, do you go to the "healthcare service/doctor/nurse" before going to another healthcare service?

Instruction: for all the next items use the Answer Card. Interviewer: Please indicate the best option.

- ◯ (4) Definitely yes
- ◯ (3) Probably yes
- ◯ (2) Probably no
- ◯ (1) Definitely no
- ◯ (9) I don't know/I don't remember

» First Contact Access - Accessibility

C4. When the "healthcare service" is open, can you get quick advice over the phone or by virtual communication tool (e.g. whatsapp, telegram, wechat, skype, hangout, email) if needed?

Instruction. for all the next items use the Answer Card. Interviewer: Please indicate the best option.

- ◯ (4) Definitely yes
- ◯ (3) Probably yes
- ◯ (2) Probably no
- ◯ (1) Definitely no
- ◯ (9) I don't know/I don't remember

C11. Is it difficult for you to get medical care at the "healthcare service" when you think you need it?

- ◯ (4) Definitely yes
- ◯ (3) Probably yes
- ◯ (2) Probably no
- ◯ (1) Definitely no
- ◯ (9) I don't know/I don't remember

» Longitudinality

D1. When you go to the "healthcare service", is it the same doctor or nurse who sees you every time?

Instruction. for all the next items use the Answer Card. Interviewer: Please indicate the best option.

- ◯ (4) Definitely yes
- ◯ (3) Probably yes
- ◯ (2) Probably no
- ◯ (1) Definitely no
- ◯ (9) I don't know/I don't remember

Revista O Mundo da Saúde

DOI: 10.15343/0104-7809.202347e14272022I

D6. Do you feel comfortable telling your concerns or problems to the "doctor/nurse"?

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

D9. Does the "doctor/nurse" know which problems are most important to you and your family?

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

D14. If it were really easy, would you switch from the "healthcare service" to another healthcare service?

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

» Coordination - Care Integration

E1. Have you consulted with any type of specialist or specialized service during the period you are being followed-up at/with the "healthcare service/doctor/nurse"?

Instruction. for all the next items use the Answer Card. Interviewer: Please indicate the best option.

- (1) Yes
- (2) No
- (3) I don't know/I don't remember

E2. Did the "doctor/nurse" suggested (referred or indicated) that you should consult with a specialist or specialized service?

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

E6. Did the "doctor/nurse" send some information to the specialist about the reason for this consultation (with the specialist or specialized service)?a)/enfermeiro(a)" enviou alguma informação para o(a) especialista sobre o motivo dessa consulta (com o(a) especialista ou no serviço especializado)?

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

E7. Did the "doctor/nurse" know what were the results of the consultation with the specialist or specialized service?

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

E9. Did the "doctor/nurse" appear interested in the quality of care you received at the consultation with the specialist or specialized service (asked if you were well cared for or not)?

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

» Coordination - Information Systems

F3. I you wanted to, could you read (consult) your medical chart at/with the healthcare service/doctor/nurse?

Instruction. for all the next items use the Answer Card. Interviewer: Please indicate the best option.

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

Revista O Mundo da Saúde

DOI: 10.15343/0104-7809.202347e14272022I

» Comprehensiveness - Available Services

G9. Counseling for mental health issues (e.g. anxiety, depression)

Interviewer: Below, we present a list of services and guidelines that you, your family, or the people who use this service may need at some point. Indicate whether these options are available (can be found/obtained) at the "healthcare service".

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

G17. Counseling for smoking (e.g. how to stop smoking)

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

G20. Counseling about changes that happen with aging (e.g. memory impairment, risk of falling)

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

» Comprehensiveness – Services Provided

H1. Guidelines on healthy eating, good hygiene, and adequate sleep (get enough sleep)

Interviewer: Below, we present a list of services that you may have received during a consultation at/with the "healthcare service/doctor/nurse". Please respond if the following items were already or are discussed (talked about) with you.

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

H5. Exercise guidelines that are right for you

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

H7. Checked and discussed the medications you are using

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

H11. How to prevent falls

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

» Family Counseling

I1. The "doctor/nurse" asks for your ideas and opinions (what do you think) when planning treatment and care for you or someone in your family?

Interviewer: The following questions are about their and their family's experience with the healthcare professionals at the "healthcare service".

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

I3. Would the "doctor/nurse" meet with members of your family if you felt it necessary?

- (4) Definitely yes
- (3) Probably yes
- (2) Probably no
- (1) Definitely no
- (9) I don't know/I don't remember

REVISTA O MUNDO DA SAÚDE

DOI: 10.15343/0104-7809.202347e14272022I

» Community Orientation

J4. Patient surveys to see if services are meeting (meeting) people's needs

Interviewer: The following is a way to evaluate the quality of healthcare services. Please indicate if at the "healthcare service" this initiative is carried out.

- ◯ (4) Definitely yes
- ◯ (3) Probably yes
- ◯ (2) Probably no
- ◯ (1) Definitely no
- ◯ (9) I don't know/I don't remember

FIELD JOURNAL

OBSERVATIONS

(Record anything that the interviewer deems important about the data collection)

_____

Confirmation of the participant's telephone/cell phone number (or any close contact, if the person does not have one)

*Forms: DDD number + contact number, all together, without spaces (Ex. 35991233901 or 3532991173). *If it is impossible to obtain this data, enter 00 in the field below*

_____

* *Indicate here to record a home visit (T0) or telephone call (T1 or T2) followed by the guest's non-consent regarding participation/continuity in the research.

- ◯ OK