

Use of Telehealth technologies in Mais Médicos Program and associated factors – Espírito Santo, 2016

Uso de tecnologías de telessaúde por médicos do Programa Mais Médicos e fatores associados — Espírito Santo, 2016

Uso de tecnologías de Telesalud por médicos del Programa Mais Médicos y factores asociados – Espírito Santo, 2016

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Abstract

Introduction: Telehealth is key to primary health care qualification. There is no knowledge about its use in the Mais Médicos Program. Here, we sought to analyze the use of Telehealth tools at Mais Médicos in Espírito Santo State, Brazil, in 2016. **Objective:** To analyze the use of Telehealth tools at Mais Médicos in Espírito Santo State, Brazil, in 2016. **Method:** This was a cross-sectional study with a structured questionnaire administered to all physicians present at regional telehealth seminars. The analysis included absolute and relative frequency and bivariate analysis with Fisher's exact test. **Results:** A total of 211 doctors (48.6% of the professionals at Mais Médicos) participated. The majority were Cubans who worked in a large urban center with a specialization in Family and Community Medicine. Most (n=130, 61.9%) had already used some Telehealth service, but discontinuously, with Teleeducation being the most used (n=101; 77.7%). Getting to know Telehealth and its tools and seeing them as relevant to improving the service were associated with greater use of technologies. The facility and type of device used to access the internet did not influence the use of the program. **Conclusion:** It is concluded that the knowledge and importance given to Telehealth tools by professionals and their work context are more associated with their use than structural working conditions.

Keywords: Primary health care; Health consortia; Telemedicine.

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Resumo

Introdução: A telessaúde é uma das estratégias de qualificação da atenção primária. Não há trabalho que analise sua utilização no Programa Mais Médicos. Logo, buscou-se analisar a utilização das ferramentas de telessaúde no Mais Médicos do estado do Espírito Santo, em 2016. **Objetivo:** Analisar a utilização das ferramentas de telessaúde no Mais Médicos do estado do Espírito Santo em 2016. **Métodos:** Trata-se de um estudo transversal, com aplicação de questionário estruturado ao total de médicos presente em seminários regionais em telessaúde. A análise incluiu frequência absoluta e relativa e análise bivariada com teste exato de Fisher. **Resultados:** Como resultado, 211 médicos (48,6% do total de profissionais do Mais Médicos) participaram, na maioria cubanos que atuavam em grande centro urbano com especialização em Medicina de Família e Comunidade. A maior parte (n=130, 61,9%) já havia utilizado algum serviço de telessaúde, mas de forma descontínua, sendo a teleeducação o mais utilizado (n=101; 77,7%). Conhecer o Programa Telessaúde Brasil Redes e suas ferramentas e vê-las como relevantes para a melhoria do serviço associou-se a maior uso das tecnologias. A facilidade e o tipo de dispositivo utilizado para acessar a internet não influenciam a utilização do programa. **Conclusões:** Conclui-se que o conhecimento das ferramentas de telessaúde e a relevância dada a elas pelos profissionais e seu entorno estão mais associados a seu uso que as condições estruturais de trabalho.

Palavras-chave: Atenção primária à saúde; Programa mais médicos; Telessaúde.

Resumen

Introducción: La telesalud es una de las estrategias de calificación de la atención primaria. No hay ningún trabajo que analice su uso en el Programa Mais Médicos. Por lo tanto, se buscó analizar el uso de herramientas de Telesalud en Mais Médicos en el estado de Espírito Santo, Brasil, en 2016. **Objetivo:** analizar el uso de herramientas de Telesalud en Mais Médicos en el estado de Espírito Santo, Brasil, en 2016. **Método:** Se trata de un estudio transversal con aplicación de un cuestionario estructurado al número total de médicos presentes en seminarios regionales sobre Telesalud. El análisis incluyó frecuencia absoluta y relativa y análisis bivariado con la prueba exacta de Fisher. **Resultados:** Como resultado, participaron 211 médicos (el 48,6% del total de profesionales de Mais Médicos), la mayoría cubanos que trabajaban en un gran centro urbano con especialización en Medicina Familiar y Comunitaria. La mayoría (n=130, un 61,9%) ya había utilizado algún servicio de Telesalud, pero de forma discontinua, siendo la teleeducación la más utilizada (n=101; un 77,7%). Conocer la Telesalud y sus herramientas y verlas como relevantes para mejorar el servicio se asociaron con un mayor uso de las tecnologías. La instalación y el tipo de dispositivo utilizado para acceder a Internet no influyen en el uso del programa. **Conclusión:** Se concluye que el conocimiento y la relevancia que los profesionales y su entorno dan a las herramientas de Telesalud están más asociados a su uso que las condiciones estructurales de trabajo.

Palabras clave: Atención primaria de salud; Consorcios de salud; Telemedicina.

INTRODUCTION

National and international evidence points to the importance of a network of primary health care (PHC) services that are resolute, accessible, comprehensive and coordinated with other health care points, aimed at greater quality, effectiveness, efficiency and equity of a public and universal health system such as the Unified Health System (SUS).¹⁻³ Over the last few decades, the expansion of the Family Health Strategy (ESF) as the main PHC model in Brazil has contributed to this challenge of qualification of SUS, although problems of a political-institutional, organizational and technical-assistance nature persist.^{4,5}

Launched in 2013, the Programa Mais Médicos (PMM; More Doctors Program) was designed with the aim of influencing the training of human resources for SUS, particularly for PHC, and improving the structure of services, strengthening the provision of comprehensive care and reducing inequality of access at the primary level of care.⁶ At least in theory, the PMM also provides temporary emergency provision of doctors for PHC in regions of great social vulnerability, difficult access and low permanence of the medical professional, this arm being called Projeto Mais Médicos para o Brasil (PMMP; More Doctors for Brazil Project).⁷

Throughout PMMP's existence, Brazilian physicians trained in qualified Brazilian or foreign educational institutions and physicians of other nationalities have participated in the PMMP, particularly

Cuban physicians who are part of an international cooperation between Brazil and the Cuban government, intermediated by the Pan American Health Organization (PAHO), which was discontinued at the end of 2018.⁶⁻⁸

Although it constantly undergoes changes, at a certain point in its implementation, the PMMB had approximately 80% adherence of the country's municipalities and 18,000 doctors (11,000 Cubans).⁹ Despite its short existence, there is evidence that it expanded access and care coverage within the scope of the PHC, with a more equitable distribution of doctors, but without solving several structural problems of the SUS, such as the lack of integration of the PHC with the different points of care, underfunding, and the poor quality of local management health and of management of work and professional career.¹⁰⁻¹²

As they are scholarship holders, PMMB physicians undergo mandatory specialized training in family health and have academic supervision from higher education institutions.⁶ In addition, they are encouraged to participate in online distance activities and to use specialized consulting and diagnosis tools made available by local telehealth programs linked to the Brazil Telehealth Networks Program.¹³ With the beginning of their implementation in 2010, such local telehealth centers (generally state-wide) aimed to offer support strategies and permanent education to PHC professionals to qualify health care, increasing its resolution and reducing referrals to other levels of care. This is because there is evidence that these initiatives, despite their low use by professionals, reduce access costs and inequalities and increase the effectiveness of health measures.^{14,15}

Thus, the articulation of the PMMB with telehealth can greatly contribute to the qualification of SUS, and accordingly, our aim was to analyze the use of tools offered by the Telehealth Program of Espírito Santo by physicians connected with PMMB in the state and also to identify factors related to the incorporation of these virtual actions in the daily lives of professionals.

To our knowledge, this is one of the first efforts to evaluate the PMMB interface with a telehealth program. On the other hand, Brazil invests substantial amounts of financial resources in permanent professional education policies,¹⁶ and there are notable gaps in the knowledge of the effectiveness of these different pedagogical support strategies for health professionals.

METHODS

This was a cross-sectional study carried out with physicians participating in the PMMB who worked in municipalities in Espírito Santo in 2016.

A structured questionnaire was self-administered by all physicians who participated in a regional seminar organized by the academic supervision team of the PMMB in each health region of Espírito Santo, totaling four events between June and August 2016. Two trained researchers presented the questionnaire during the event and monitored its administration. This questionnaire was constructed by the authors inspired by Alkmin,¹⁷ in the planning needs of Telehealth in Espírito Santo and in a non-systematic review of studies on the implementation of telehealth services, and it was previously tested in a sample of ten professionals.

The questionnaire contains questions about the profile of the professional: the type of doctor's relationship with the PMMB (Brazilian physician with professional registration in the country — *doctor connected with the Regional Council of Medicine (CRM Brazil)*; physician, Brazilian or not, who graduated in another country — *individual exchange doctor*; and Cuban physician participating in international

cooperation between the Brazilian government and the PAHO and Cuba — *cooperating doctor*); place working (municipality and Health Region according to the state's Regionalization Master Plan¹⁸); time working in the program (in years); and academic training with a postgraduate degree in Family and Community Medicine.

In addition, the professional was asked whether they had used any service of the Espírito Santo Telehealth Program at least once (asynchronous teleconsulting, teleeducation and/or telediagnosis in cardiology). If there was a positive answer, the time elapsed in months between participation in the research and the last use of the program's services was asked; the extent of knowledge that the professional had about the objectives and services offered (ordinal scale: none, little, some, good or great); and the degree of importance that the professional gave to Telehealth, as well as the perception he had of the importance given to the program by the health professionals with whom he works and by the director of the health service (ordinal scale from 1, no importance, to 5, much importance).

Finally, it was asked which devices were used by the professional to access the internet and Telehealth (computer, smartphone, tablet, etc.), as well as the degree of ease of access to the internet at the service location and at rest time (scale ordinal from 1, no access, to 5, very easy access). The reason for the last question is that previous studies have shown that a substantial number of professionals who use the services of Espírito Santo Telehealth access the system during non-business hours.^{19,20}

The questionnaires were entered in Excel[®] by a researcher and revised in their entirety by one of the authors of the study. Dichotomous and categorical variables were described by absolute and relative frequencies. The association between the use of any telehealth service and the other variables was described using the tabulation of use, according to the explanatory variables. Descriptive and bivariate analyses were performed with the application of Fisher's exact test, with a significance level of 5%. Data analysis was performed by a professional statistician, with the aid of the Statistical Package for the Social Sciences (SPSS) 20.0 software.

Participation in the study was conditioned on the signing of an informed consent form, which was read and explained in detail by the researchers responsible for administering the questionnaire. All ethical requirements set out in Resolution 466/2012 of the National Health Council were strictly followed. The research project was approved by the Research Ethics Committee of the Health Sciences Center of the Federal University of Espírito Santo, with Approval No. 700.093/2014. There was no plan to share data from this study.

RESULTS

The study included 211 doctors who worked in the PMMB of Espírito Santo, which corresponded to 48.6% of the total of 434 doctors included in the program across the state in the period analyzed. One of the questionnaires obtained was eliminated from the sample for not having at least 80% of the questions answered by the professional. Therefore, the analysis was performed with the responses of 210 physicians.

Of the total number of respondents, most were cooperating doctors (n=111; 56.3%), worked in municipalities in the metropolitan region of Grande Vitória (n=105; 70.9%), were connected with the PMMB for a period of 1 to 3 years (n=147; 79.5%) and had a postgraduate degree in family and community medicine (n=138; 70.1%) (Table 1). It should be noted that this specialization was more common among cooperating doctors (n=107; 79.9%) (data not shown in the table).

Table 1. Profile of the sample and use of services of Espírito Santo Telehealth among physicians of the Mais Médicos for Brazil Project — Espírito Santo, 2016.

	Sample		Use of Telehealth		p value*
	n	%	n	%	
Connection with Mais Médicos (n=197)					
Individual exchange physician	23	11.7	16	69.6	0.56
Cooperating physician	111	56.3	65	58.6	
CRM Brazil physician	63	32.0	40	63.5	
Time working at Mais Médicos (n=185)					
Less than 1 year	20	10.8	8	40.0	0.054
1 to 3 years	147	79.5	93	63.3	
More than 3 years	18	9.7	14	77.8	
Place of practice=148)					
Grande Vitória	105	70.9	59	56.2	0.02
Southern interior	30	20.3	21	70.0	
Northern interior	13	8.8	12	92.3	
Specialization in family and community medicine (n=138)	138	70.1	81	58.7	0.119
Ease of internet access at the Health Unit (n=199)					
No access	98	49.2	58	59.2	0.163
Difficult access	37	18.6	23	62.2	
Regular access	21	10.6	11	52.4	
Easy access	22	11.1	14	63.6	
Very easy access	21	10.6	18	85.7	
Ease of internet access outside the Health Unit (n=200)					
No access	19	9.5	11	57.9	0.419
Difficult access	10	5	6	60.0	
Regular access	40	20	21	52.5	
Easy access	52	26	31	59.6	
Very easy access	79	39.5	55	69.6	
Device used to access the internet (n=201)					
Computer	77	38.3	49	63.6	0.816
Smartphone	33	16.4	18	54.5	
Tablet	3	1.5	2	66.7	
Other	3	1.5	1	33.3	
Computer and smartphone	67	33.3	40	59.7	
Computer and tablet	4	2.0	3	75.0	
Computer and other	3	1.5	3	100.0	
Computer, smartphone and tablet	9	4.5	6	66.7	
Computer, smartphone and other	2	1.0	2	100.0	

* Fisher's exact test. Numbers in bold represent significant p values.

A total of 130 physicians (61.9%) reported having used at least one Espírito Santo Telehealth service at least once in their life (Table 2). However, only 23 (17.7%) had used more than one service, of which 21 (16.2%) stated that they had already used teleconsulting and teleeducation services and two (1.5%) the three services of the program. The teleeducation service was the most used by PMMB physicians (n=101; 77.7%), followed by asynchronous teleconsulting (n=52; 40%) (Table 2).

Table 2. Pattern of use of services of Espírito Santo Telehealth by professionals of the Mais Médicos Program — Espírito Santo, 2016.

	n	%
Use of any Telehealth service at any moment (n=211)	130	61.9
Type of Telehealth service used (n=130)		
Asynchronous Teleconsulting	52	40
Teleeducation (webconferences)	101	77.7
Telediagnosis	10	7.7
Asynchronous teleconsulting and teleeducation (webconferences)	21	16.2
All services	2	1.5
Time since last use of asynchronous teleconsulting (n=51)		
Up to 1 month	5	9.8
1 to 6 months	34	66.7
More than 6 months	12	23.5
Time since last use of teleeducation (webconferences) (n=65)		
Up to 1 month	6	9.2
1 to 6 months	53	81.5
More than 6 months	6	9.2

Numbers in bold represent significant p values.

The results also show the discontinuous use of Telehealth services, as a small portion of physicians reported having used a service in the 30 days prior to the interview — only five for asynchronous teleconsulting and six for teleeducation (Table 2).

Proportionally, physicians who worked outside the metropolitan region were the ones who most reported having used Telehealth (76.7% of physicians in the interior of the state versus 56.2% of those in the metropolitan region) (Table 1). On the other hand, the proportion of cooperating physicians who used Telehealth was greater for those who worked in the interior compared to those who worked in the metropolitan region, with this ratio being inverse in the case of CRM Brazil physicians (Figure 1).

With regard to internet access, 98 (49.2%) physicians reported not having access at the workplace, and 37 (18.65%) said that access was difficult, making it evident that PHC had a connection problem in the state. Internet access outside the Health Unit was much easier; only 19 (9.5%) doctors reported not having access, and ten (5.0%) said they had difficult access. Despite this, the data show that the ease of access to the internet by PMMB physicians both in and outside the workplace was not related to the use of Telehealth services ($p=0.163$ and $p=0.419$, respectively). Likewise, the type of device used by the physician to access the internet did not influence the use of the program ($p=0.816$); most professionals used computers and smartphones for this (Table 1).

As shown in Table 3, most physicians demonstrated knowledge of the objectives of the Telehealth Program as well as the services it provided (121–57.9% professionals reported having good/great knowledge of its objectives, and 105–50.5% had good/great general knowledge about the services provided), and the level of knowledge alleged by the physician about the program and its services was positively associated with its use. On the other hand, the data show that the level of knowledge that the physician had about each service taken separately was positively associated with its use ($p<0.001$ for asynchronous teleconsulting and teleeducation services and $p=0.001$ for telediagnosis).

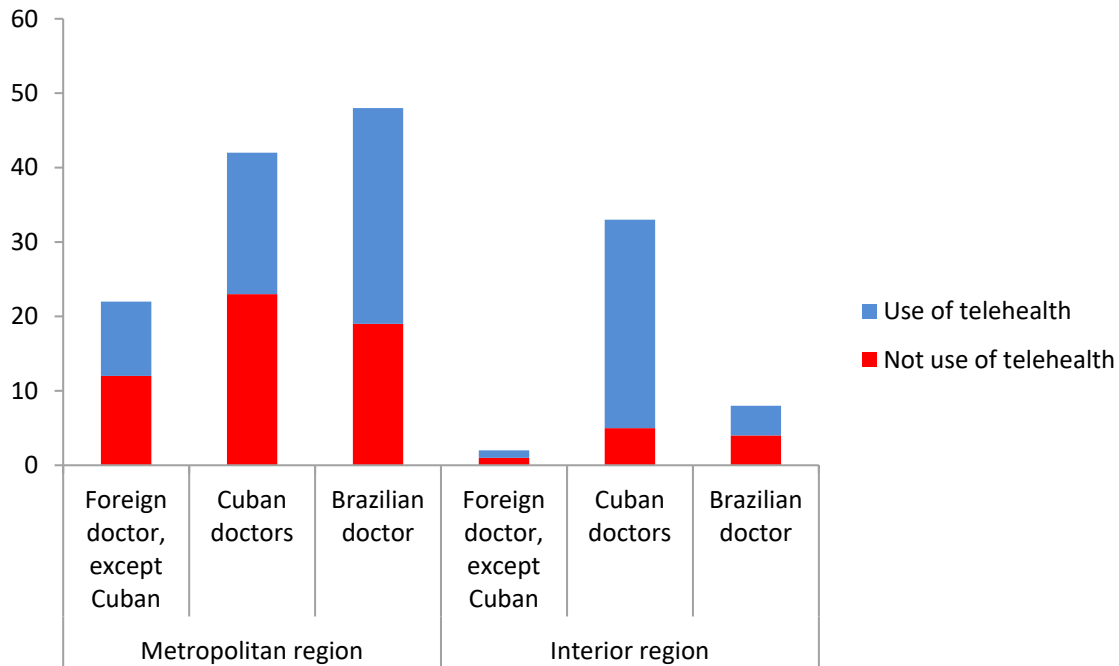


Figure 1. Use of Telehealth Program according to the physician's relationship with the Mais Médicos Program in metropolitan and interior regions — Espírito Santo, 2016.

Table 3. Profile of the use of services of Espírito Santo Telehealth by physicians of the Mais Médicos Program according to knowledge and importance given to the program — Espírito Santo, 2016.

	Sample		Use of Telehealth		p value*
	n	%	N	%	
Knowledge of Telehealth objectives (n=209)					
No knowledge	5	2.4	0	0.0	
Little knowledge	29	13.9	6	20.7	
Some knowledge	54	25.8	31	57.4	<0.001
Good knowledge	98	46.9	72	73.5	
Great knowledge	23	11.0	21	91.3	
General knowledge of the services provided by Telehealth (n=208)					
No knowledge	6	2.9	0	0.0	
Little knowledge	36	17.3	11	30.6	
Some knowledge	61	29.3	36	59.0	<0.001
Good knowledge	86	41.3	66	76.7	
Great knowledge	19	9.1	17	89.5	
Knowledge of the asynchronous teleconsulting service (n=207)					
No knowledge	15	7.2	6	40.0	
Little knowledge	55	26.6	23	41.8	
Some knowledge	52	25.1	30	57.7	<0.001
Good knowledge	69	33.3	56	81.2	
Great knowledge	16	7.7	14	87.5	

Continue...

Table 3. Continuation.

	Sample		Use of Telehealth		p value*
	n	%	N	%	
Knowledge of the teleeducation service (n=206)					
No knowledge	9	4.4	0	0.0	
Little knowledge	49	23.8	20	40.8	
Some knowledge	51	24.8	29	56.9	<0.001
Good knowledge	81	39.3	64	79.0	
Great knowledge	16	7.8	16	100.0	
Knowledge of the service of teleradiology in cardiology (n=206)					
No knowledge	41	19.9	21	51.2	
Little knowledge	62	30.1	31	50.0	
Some knowledge	53	25.7	35	66.0	0.001
Good knowledge	40	19.4	32	80.0	
Great knowledge	10	4.9	10	100.0	
Importance given to Telehealth Program (n=202)					
No importance	7	3.5	3	42.9	
Little importance	8	4.0	5	62.5	
Some importance	39	19.3	19	48.7	0.014
Good importance	61	30.2	35	57.4	
Much importance	87	43.1	66	75.9	
Perception of the importance given to the Telehealth Program by the health team (n=199)					
No importance	47	23.6	27	57.4	
Little importance	19	9.5	5	26.3	
Some importance	47	23.6	36	76.6	0.001
Good importance	44	22.1	26	59.1	
Much importance	42	21.1	32	76.2	
Perception of the importance given to the Telehealth Program by the Health Unit director (n=193)					
No importance	66	34.2	35	53.0	
Little importance	21	10.9	10	47.6	
Some importance	42	21.8	31	73.8	0.013
Good importance	34	17.6	21	61.8	
Much importance	30	15.5	25	83.3	
Perception of the importance given to the Telehealth Program by the city's Primary Health Care Coordinator (n=191)					
No importance	45	23.6	27	60.0	
Little importance	26	13.6	11	42.3	
Some importance	37	19.4	24	64.9	0.047
Good importance	44	23.0	33	75.0	
Much importance	39	20.4	28	71.8	
Perception of the importance given to the Telehealth Program by the Municipal Health Secretary (n=185)					
No importance	55	29.7	34	61.8	
Little importance	34	18.4	15	44.1	
Some importance	44	23.8	28	63.6	0.014
Good importance	25	13.5	21	84.0	
Much importance	27	14.6	21	77.8	

* Fisher's exact test. Numbers in bold represent significant p values.

Following this line, the importance given to the program by the professional was positively associated with the use of telehealth services, since it is a tool that contributes to the improvement of the service, but so was the perception that the professional had of the importance given to the program by the professionals and managers with whom he worked (Table 3).

DISCUSSION

The main finding of this study was to show that knowledge of Telehealth tools and the importance given to them by professionals and their surroundings are more associated with their use than structural working conditions (computerization and internet availability in the service). It is known that information and communication technologies encounter great challenges to be incorporated into the work process of PHC professionals on a daily basis.²¹ Other studies have already shown a low and irregular rate of use of tools, regardless of professional category and context, raising questions about the impact and sustainability of the Telehealth Program in the country, despite the evidence that its implementation is associated with better health outcomes.²²⁻²⁵ Thus, the present study suggests that greater efforts should be directed towards raising awareness and adapting technologies to the needs of professionals, so that they know the tools and recognize the importance of the program.

This finding corroborates some results of analyses of the implementation of the Telehealth Program carried out in the states of Pernambuco²² and Minas Gerais^{23,24} and in Espírito Santo itself.²⁵ Oliveira et al.,²² in analyzing the Pernambuco scenario, suggested that the structural and procedural components for the operationalization of telehealth actions are relevant, but not sufficient to achieve the desired outcomes, particularly in terms of teleeducation and teleradiology. They point out as possible causes, namely lack of training, inadequate quality of the internet and local social factors related to the potential users of the program.

Pessoa et al.²⁴ studied the use of teleconsulting in PHC in Minas Gerais and showed that the structure (for example, computerization and internet) and the organization of work processes (for example, working conditions and protected time) also were determinant, being more relevant the training for the use of the tools and the motivation and support given by the local managers to the professionals.

Also analyzing the teleconsulting service in the Minas Gerais context, Alkmin et al.²³ saw that the greatest tool use predictor was the perception of usefulness and importance for the daily solution of problems that the professional faces, also being relevant the training, the simplicity of the system and the lack of alternatives for discussing clinical cases in the professional's immediate environment. No relationship was found with workplace contextual factors.

In turn, Sarti et al.²⁵ suggested that, in the Espírito Santo context, greater proximity of the executive team of the Telehealth Program with professionals and municipal managers, through seminars and close and permanent contacts of awareness and guidance, could have a positive effect on the rate for using teleconsulting and teleeducation. This occurs, perhaps, by increasing these player's knowledge about the tools and their perception of their usefulness and importance, although these authors did not perform specific analyses on the aspects of structure and process in this work.

The influence that professionals' knowledge about telehealth tools has on their use is contradictory in the literature. Alkmin et al.²³ questioned the relationship between knowledge about the tools and their use in a sample of professionals from Minas Gerais with a high rate of awareness (99%) about the existence and objectives of the program. Pessoa et al.,²⁴ in turn, showed that this variable has important limitations

for predicting the use of teleconsulting, although it proved to be relevant in the comparison between municipalities with some telehealth activity and with no action in this regard. In the present study, 103 physicians (48.8%) reported having insufficient knowledge of telehealth tools, and this was a variable that significantly influenced the use of the program. This difference can be explained by the particularities of the study population. Here, most of the sample were foreign doctors who arrived in the country without experience with its health system. It is suggested, therefore, that this variable has explanatory potential on the low rates of use of Telehealth, depending on the context of implementation.

On the other hand, the integration of the program as one of the axes of permanent education within the scope of the PMMB proved to be incomplete and irregular in the context of Espírito Santo, not differing from the PHC set in SUS.²²⁻²⁶ It is possible that the non-mandatory character of the use of these tools has some influence, although the solution, in our view, does not pass through the mandatory nature of incorporating technologies. In addition, PMMB physicians participate in three other continuing education activities, where these are indeed mandatory,^{6,13} which may reduce the need felt by professionals to participate in Telehealth. The articulation of academic supervision actions, specialization in the broad sense, online courses via Unasus and Telehealth in the PMMB still deserves a more robust scientific analysis. Little is known about the effectiveness of each of these interventions in the qualification of PHC and what are the best ways of integrating and complementing these different interventions with others, which occur at the local initiative.

The main limitations of this study were its cross-sectional design, which did not allow for causal analysis, and the lack of adjustment for possible confounding factors. The reverse causality bias may be present in the relationship between knowledge about the tool and its use, and it is not possible to state whether one is the cause or consequence of the other. As it became clear, the Telehealth Program is a complex intervention in an equally complex and heterogeneous context.²⁷ Social, cultural, economic, political, technical, psychological and conjunctural factors can decisively influence the outcomes of this program, which in different ways touches on many policies that jointly affect the PHC setting. Thus, this study design contributes to advancing knowledge about the implementation of Telehealth in Brazil, but it does not exhaust the need for research with different designs that take into account this stated complexity, including qualitative and randomized intervention studies.

On the other hand, this investigation was carried out in a context prior to the COVID-19 pandemic, in which telehealth models offered directly to health professionals predominated. During the pandemic, direct online patient care services were standardized and spread intensely, aligning Brazil with what is hegemonic in more developed countries in terms of information and communication technologies.^{28,29} The data in this work may not be generalizable to this new pandemic care context. In addition, telehealth services are diverse and are organized with different objectives, incorporating specific technologies and structures, such as Regula + Brasil, a program aimed at reducing medium-complexity referrals, bringing family doctors closer to focused specialists.³⁰

In summary, when analyzing the perceptions of medical professionals from the PMMB, this study adds to the set of literature that points to the complexity of the factors that influence the use of telehealth tools by professionals in the area. By demonstrating that the structural factors are not related to the use of the Telehealth Program by these professionals, which is still a point to be better explored in the Brazilian literature,³¹ this work contributes to problematize the emphasis that such factors often gain in the discourses that seek to explain the low incorporation of technologies in daily PHC. It is not enough, therefore, to computerize the PHS and provide it with quality connectivity. Perhaps more than at other

levels of care, PHC requires permanent support for professionals,^{31,32} which suggests that the Telehealth Program needs to be incorporated into a robust and effective local policy of permanent education and improvement of the resolvability of health services.

CONFLICT OF INTEREST

Nothing to declare.

AUTHORS' CONTRIBUTIONS

TDS: Conceptualization, Data curation, Formal analysis, Writing – original draft. KTS: Conceptualization, Formal analysis, Writing – review & editing. RVA: Conceptualization, Formal analysis, Writing – review & editing. LFF: Data curation, Formal analysis, Writing – review & editing. APSCA: Data curation, Formal analysis, Writing – review & editing.

DECLARATION OF RESPONSIBILITY AND COPYRIGHT TRANSFER

We declare that this is an original manuscript, and that this version was made available to the public preprint format on the SciELO portal: <https://doi.org/10.1590/SciELOPreprints.2998>.

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