

## Original Article

## COVID-19 control and guidance manual for primary health care professionals

*Manual de orientação e controle da COVID-19 para profissionais da atenção primária à saúde*Geraldo Magela Salomé<sup>1</sup>, Thuanny Fernandes Brito Noguchi<sup>2</sup>

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**ABSTRACT:** Goals: Develop a manual and validate the content to guide health professionals in coping with COVID-19 in Primary Care concerning the use of the Personal Protective Equipment. Method: integrative literature review of articles published from 2016 to 2021 found in the main Health Sciences Databases. The validation of the manual content was carried out with 38 health professionals who provide primary care (nurses, physiotherapists, doctors, dentists, radiology technologists and biomedical professionals) using the Delphi technique. The Content Validity Index and Cronbach's Alpha were adopted for data analysis. Results: In the first manual evaluation, there was no agreement among the evaluators, which received evaluation from inadequate to totally adequate. After we made the corrections requested by the judges, the questionnaires were sent back for new evaluation. They were reassessed as adequate and totally adequate. Concerning the average of the general content index, in the first evaluation, it varied between 0.935 and 0.939. In the second evaluation, it was 1.0. Conclusion: The manual "Guidelines for Health Professionals in Coping with COVID-19 in Primary Care" was developed and validated by professionals who are on the front lines of Primary Care in the fight against COVID-19.

**Keywords:** Personal protective equipment; Family health; Home care SARS-CoV-2; Book.

**RESUMO:** *Objetivos:* Desenvolver um manual e validar o conteúdo para orientar os profissionais de saúde no enfrentamento da COVID-19 na Atenção Primária, relacionado ao uso dos Equipamentos de Proteção Individual. *Método:* revisão integrativa da literatura dos artigos publicados de 2016 a 2021 encontrados nas principais bases de dados em Ciências da saúde. A validação do conteúdo do manual foi efetuada com 38 profissionais de saúde que realizam atendimentos na atenção primária (enfermeiros, fisioterapeutas, médicos, dentistas, tecnólogo em radiologia e biomédicos), utilizando a técnica de Delphi. Para a análise de dados, foram adotados o Índice de Validade de Conteúdo e o Alpha de Cronbach. *Resultados:* Na primeira avaliação do manual, não houve concordância entre os avaliadores, o qual recebeu avaliação de inadequado a totalmente adequado. Após realizadas as correções solicitadas pelos juízes, os questionários foram reenviados para uma nova avaliação, sendo reavaliados como adequados e totalmente adequados. Com relação à média do índice de conteúdo geral, na primeira avaliação, variou entre 0,935 e 0,939 e, na segunda avaliação, foi 1,0. *Conclusão:* O manual "Orientações para profissionais da Saúde no enfrentamento do COVID-19 na Atenção Primária" foi desenvolvido e validado por profissionais que estão na linha de frente na Atenção Primária no combate à COVID-19.

**Palavras-chaves:** Equipamento de proteção individual; Saúde da família; Atendimento domiciliar; SARS-Cov-2; Atenção primária à saúde; Livro.

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## INTRODUCTION

Professionals who provide home care must have scientific technical knowledge that goes beyond those ones learned during professional training, as entering the home and developing care actions require much more than knowing and acting. That is because care is performed in a space controlled by the patient and his family, and the health professional is a mere guest, subject to various health problems<sup>1,2</sup>.

In the search for strategies that can guide and minimize health problems for professionals who provide home care on the front lines, the use of personal protective equipment is necessary to prevent them from getting COVID-19 and, above all, to prevent the spread of the disease during home care<sup>3,4</sup>.

Personal protective equipment is all the devices that health professionals must use when caring for patients with infectious diseases. They must be for individual use and intended to protect the physical integrity of the professional, including gloves, eye or face protectors, masks, aprons, and caps<sup>5,6</sup>.

During assistance, PPE protects professionals from risks of contamination and provides better quality care, besides offering protection to patients with some sensitivity who cannot catch any virus with risk of death. Finally, the use of Personal Protective Equipment by professionals during care has the function of preventing, controlling, reducing, or eliminating the risk of contracting diseases<sup>5,6</sup>.

Another important factor, besides all the guidance that professionals should provide to family members, is regarding the use of masks and social distancing when in public areas. People should be instructed to take proper care when entering the home, which includes decontaminating purchases and clothing, as well as establishing areas for disposal of potentially contaminated clothing.

Primary Health Care, Home Care, and the Home Care Service can be important agents to detect cases and contacts of COVID-19 and identify the circulation of the virus using rapid tests or collection of material for exams.

Institutions must develop protocols, manuals, booklets, and leaflets to train their professionals in the care concerning the use of personal protective equipment during home care and on the necessary guidelines to prevent infection contamination. Thus, Primary Health Care, Home Care, and Home Care Services will prevent these professionals from being infected and curb its spread among family members, caregivers, and the community<sup>6,7</sup>.

In this context, teaching materials are instruments or objects that can be resources that enable learning something, stimulating and directing the teaching and learning process. They can be understood as a fundamental mediation tool, which takes place through the instruments of human culture production and its relationship with the world. The use of that material permeates institutional,

cultural, historical, political, and economic issues<sup>8</sup>.

This study aimed to develop a manual and validate the content to guide health professionals in coping with COVID-19 in Primary Care concerning the use of Personal Protective Equipment.

## METHODS

That is a technology validation descriptive study of the methodological development research type.

The manual construction process was adapted to the premises for the elaboration of guidance manuals for health care. It followed the phases: situational diagnosis, content survey, formulation and assembly of the educational manual, validation, and implementation of the manual<sup>6</sup>.

### Construction of the Manual

#### First step: Situational diagnosis

The idea of writing this manual was born from observations made in clinical practice because some professionals who work on the front line in the COVID-19 pandemic present some difficulty in the correct use of personal protective equipment and in guiding preventive measures to avoid the spread of infection among professionals, family members, caregivers, and the community. If such procedures are not performed correctly, the professional, family, caregiver, and community will be at risk, with the possibility of suffering damage, that is, the risk of becoming contaminated and spreading COVID-19 to the community.

#### Second step: Content survey

An integrative literature review was carried out with the Health Sciences databases: (MEDLINE), Scientific Electronic Library Online (SciELO), and Latin American and Caribbean Literature on Health Sciences (LILACS).

We used the following controlled descriptors in Health Sciences: COVID-19, Personal Protective Equipment, and Family Health Strategy. The search strategy occurred from its different combinations, using the AND Boolean operator in Portuguese, Spanish, and English.

For the selection of the publications, only the studies that have a direct connection with the theme and original articles published between 2016 and 2021 were adopted following inclusion criteria. The integrative review was carried out in April 2021.

As exclusion criteria: theses, dissertations, monographs, technical reports, and articles that, after reading the abstract, are not related to the proposed object

of study, besides the publications that are repeated in the databases.

Titles, abstracts, and full articles were read independently by two authors to ensure that the texts addressed the review's guiding question and met the established inclusion criteria. In case of doubt regarding the selection, it was decided to include the publication first and then decide on its selection only after reading its entire content.

Based on this survey, we prepared an educational manual, which comprises a sequence of three phases.

### **Phase 1 - COVID-19 infection.**

In this phase, information on the definition, type, signs, and symptoms of SARS-Cov-2 was presented in addition to the preventive measures for COVID-19 recommended by the World Health Organization.

### **Phase 2 - Use of Personal Protective Equipment by health professionals during home care**

In this phase, the definition of PPE and the description of the types of PPE recommended by the World Health Organization, which should be used during the provision of care to patients with COVID-19, were provided.

Well-defined instructions were also presented on the correct techniques for putting on and removing PPE during care in Primary Care and at home, which must be carried out systematically in order to prevent professionals from contracting the infection caused by COVID-19.

### **Phase 3 - Preventive measures**

There are preventive measures that must be transmitted by professionals to patients, family members, caregivers, and the community during care in Primary Care and at home to prevent the spread of infection.

### ***Third Step: Formulation/ manual assembly***

The illustrations and preliminary content were developed and submitted to the editing and layout process, following criteria concerning the content, structure/organization, language, layout and design, cultural sensitivity, and suitability for the public. That process was carried out by a professional with experience in the field.

We selected and took the images from the internet, and some were then converted into drawings and refined in Corel Draw®, version 17.

### ***Fourth Step: Manual Validation to guide health professionals in coping with COVID-19 in Primary Care***

The validation of the manual was carried out according to the Brazilian standard ABNT ISO/IEC 25062: 2014. In this study, the evaluators were nurses, physiotherapists, doctors, dentists, biomedical, radiology technologists, and biologists, totaling 38 participants.

We selected the evaluators through snowball convenience sampling. Thus, when a subject who met the established inclusion criteria was identified, he was asked to suggest other participants. The inclusion criteria of the judges were: professionals who were health professionals with a degree, working on the front line of assistance to those affected by COVID-19 in primary care. Professionals who agreed to participate in the research but did not respond to the questionnaire within the established period of 15 days were excluded.

For data collection, we sent an invitation letter to the research participants, whose contingent was made up of 71 health professionals. This letter included the initial personal introduction, clarifications on the research theme, the opinion of the Research Ethics Committee, the step-by-step steps for the effective participation of professionals, and the communication of the period of eight days for the respondents to complete the questionnaire for each evaluation round and forward the responses to the researcher. Of the 71 contacted, 38 professionals agreed to participate in the study and returned the questionnaire within the requested period.

We sent a specific questionnaire divided into two parts to the judges. They were sent to the evaluators by email and WhatsApp in the format of a questionnaire by Google Forms, where the participants read the TCLE and signed it. They freely agreed to participate in the research, informing the full name.

In the first part of the questionnaire, the professionals completed the following items: the undergraduate course, whether they had taken a postgraduate course (residency, specialization, master's, or doctorate), time since graduation, time of experience in teaching, and time of experience in assistance.

In the second part of the questionnaire, professionals evaluated the content of the manual, which consists of clarity, vocabulary, illustration, motivation, the definition of COVID-19 and SARS-CoV-2, signs and symptoms, prevention for SARS-COV-2, definition and type of personal protective equipment, clothing and undressing of personal protective equipment used during care in Primary Care and at home, and types of masks and technique for putting on and removing masks by patients, family members, and caregivers.

We used Likert scale in the manual content evaluation questions and had the following response options: completely adequate, adequate, partially adequate, and inadequate. If the judges judged an item as partially adequate or inadequate, they were asked to provide

suggestions for improving the content.

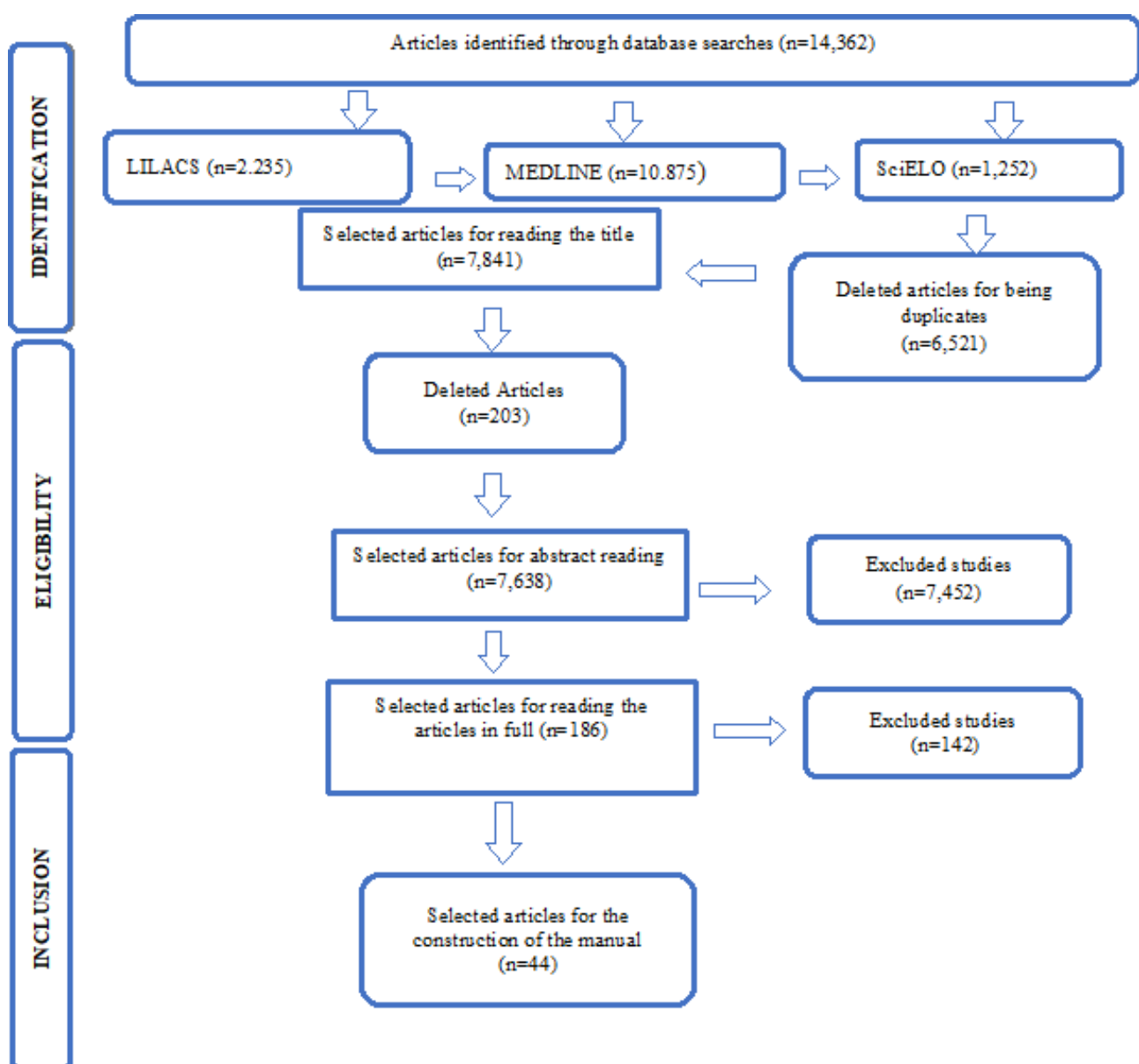
To validate the manual content, we adopted the Delphi technique, whose method is characterized by obtaining the opinions of judges with specific knowledge in a given area through the use of questionnaires that allow the analysis and evaluation of the contents of the instruments by the judges in search of a consensus among them<sup>9</sup>.

We used The Content Validity Index (CVI) to measure the degree of agreement between the judges related to the content of the manual. The CVI value was calculated as the sum of the number of adequate and partially adequate responses divided by the total number of responses. The value of the CVI must be higher than or equal to 0.80 of agreement between the judges<sup>10</sup>.

The Ethics and Research Committee approved this research under opinion number 4.532.193 and CAAE number 42676320.6.0000.5102.

## RESULTS

Firstly, we identified 14,362 articles. We excluded 6,521 because they were duplicated in the databases. Thus, we selected 7,841 articles for the title reading and excluded 203. We read the abstracts for 7,638 articles, which resulted in a sample of 186 articles for reading the full text. Of these, 142 were excluded because they did not answer the guiding question, which ended up in 44 articles chosen to build the manual, as shown in Figure 1 below.



**Figure 1** - Flowchart of the identification process, selection, and inclusion of studies prepared based on the PRISMA recommendation

Table 1 presents the judges' evaluation using the Delphi technique on the characteristics of the manual content. In the first analysis, the judges evaluated questions

concerning the application content as inadequate, partially inadequate, adequate, and completely adequate.

**Table 1** – First evaluation of the Manual content “Guidelines for Health Professionals in Coping with COVID-19 in Primary Care” by specialists, according to the Delphi Technique

First Evaluation Questions evaluated by the judges	Inadequate		Partially inadequate		Adequate		Completely adequate	
	N	%	N	%	N	%	N	%
Is the content appropriate for the target audience?	00	0.00	01	2.60	10	26.30	27	71.10
Does the content present information relevant to the target audience?	00	0.00	00	0.00	07	18.40	31	81.60
Are the titles relevant?	00	0.00	01	2.60	07	18.40	30	78.90
Are the subheadings relevant?	00	0.00	00	0.00	08	21.10	30	78.90
Is the text sequence logical and coherent?	00	0.00	01	2.60	06	15.80	31	81.60
Does the content facilitate the teaching and learning process on the subject?	00	0.00	00	0.00	08	21.10	30	78.90
Is the vocabulary accessible to the target audience?	00	0.00	01	2.60	11	28.90	26	68.40
Is the text of the manual clear and objective?	00	0.00	00	0.00	10	26.30	28	73.70
Is the verbal language easy to assimilate?	00	0.00	02	5.30	06	15.80	30	78.90
Are the illustrations in the manual necessary to understand the content?	00	0.00	01	2.60	08	21.10	29	76.30
Do the illustrations motivate the manipulation of the printed material?	00	0.00	01	2.60	08	21.10	29	76.30
Do the illustrations elucidate the content?	00	0.00	00	0.00	09	23.70	29	76.30
Is the illustration quality appropriate for the content of the manual?	00	0.00	02	5.30	08	21.10	28	73.70
Is the content motivating?	00	0.00	00	0.00	07	18.40	31	81.60
Did the content catch your interest?	00	0.00	00	0.00	08	21.10	30	78.90
Did the content clarify doubts about the subject?	00	0.00	00	0.00	05	13.20	33	86.80
As for the description of the definition of COVID-19.	00	0.00	01	2.60	08	21.10	29	76.30
As for the description of the type of COVID-19.	00	0.00	00	0.00	10	26.30	28	73.70
As for the description of the signs and symptoms of COVID-19.	00	0.00	01	2.60	06	15.80	31	81.60
As for the description of measures to prevent COVID-19.	00	0.00	01	2.60	03	7.0	34	89.50
As for the description of the definition of PPE.	00	0.00	00	0.00	04	10.50	34	89.50
As for the description of the types of PPE recommended by the World Health Organization, which should be used by health professionals during the COVID-19 pandemic	00	0.00	01	2.60	04	10.50	33	86.80
As for the description of the correct techniques for putting on PPE (cap, goggles, apron, face shield, mask, glove).	00	0.00	00	0.00	05	13.20	33	86.80
As for the description of the technique for removing PPE: (cap, goggles, apron, face shield, mask, glove)	00	0.00	00	0.00	05	13.20	33	86.80
As for the description of the definition of the masks.	00	0.00	00	0.00	06	15.80	32	84.20
As for the description of the correct techniques for putting on the masks.	00	0.00	00	0.00	07	18.40	31	81.60
As for the description of the correct techniques for removing masks.	00	0.00	00	0.00	07	18.40	31	81.60
As for the description of which fabric is indicated for making the homemade mask.	00	0.00	00	0.00	09	23.70	29	76.30



Table 2 presents the judges' evaluation using the Delphi technique on the characteristics of the manual content. In the second evaluation, after corrections were

made based on the judges' comments, the manual was sent back to these specialists, who evaluated the questions presented as appropriate and completely adequate.

**Table 2** – Second evaluation of the Manual content “Guidelines for Health Professionals in Coping with COVID-19 in Primary Care” by specialists, according to the Delphi Technique.

Second Evaluation Questions evaluated by the judges	Inadequate		Partially inadequate		Adequate		Completely adequate	
	N	%	N	%	N	%	N	%
Is the content appropriate for the target audience?	00	0.00	00	0.00	11	28.90	27	71.10
Does the content present information relevant to the target audience?	00	0.00	00	0.00	07	18.40	31	81.60
Are the titles relevant?	00	0.00	00	0.00	07	18.40	31	81.60
Are the subheadings relevant?	00	0.00	00	0.00	09	23.70	29	76.30
Is the text sequence logical and coherent?	00	0.00	00	0.00	06	15.80	32	84.20
Does the content facilitate the teaching and learning process on the subject?	00	0.00	00	0.00	08	21.10	30	78.90
Is the vocabulary accessible to the target audience?	00	0.00	00	0.00	11	28.90	27	71.10
Is the text of the manual clear and objective?	00	0.00	00	0.00	10	26.30	28	73.70
Is the verbal language easy to assimilate?	00	0.00	00	0.00	11	28.90	27	71.10
Are the illustrations in the manual necessary to understand the content?	00	0.00	00	0.00	08	21.10	30	78.90
Do the illustrations motivate the manipulation of the printed material?	00	0.00	00	0.00	08	21.10	30	78.90
Do the illustrations elucidate the content?	00	0.00	00	0.00	09	23.70	29	76.30
Is the illustration quality appropriate for the content of the manual?	00	0.00	00	0.00	08	21.10	30	78.90
Is the content motivating?	00	0.00	00	0.00	07	18.40	31	81.60
Did the content catch your interest?	00	0.00	00	0.00	08	21.10	30	78.90
Did the content clarify doubts about the subject?	00	0.00	00	0.00	05	13.20	33	86.80
As for the description of the definition of COVID-19.	00	0.00	00	0.00	05	13.20	33	86.80
As for the description of the type of COVID-19.	00	0.00	00	0.00	10	26.30	28	73.70
As for the description of the signs and symptoms of COVID-19.	00	0.00	00	0.00	05	13.20	33	86.80
As for the description of measures to prevent COVID-19.	00	0.00	00	0.00	04	10.50	34	89.50
As for the description of the definition of PPE.	00	0.00	00	0.00	04	10.50	34	89.50
As for the description of the types of PPE recommended by the World Health Organization, which should be used by health professionals during the COVID-19 pandemic	00	0.00	00	0.00	07	18.40	31	81.60
As for the description of the correct techniques for putting on PPE (cap, goggles, apron, face shield, mask, glove).	00	0.00	00	0.00	05	13.20	33	86.80
As for the description of the technique for removing PPE: (cap, goggles, apron, face shield, mask, glove)	00	0.00	00	0.00	05	13.20	33	86.80
As for the description of the definition of the masks.	00	0.00	00	0.00	06	15.80	32	84.20
As for the description of the correct techniques for putting on the masks.	00	0.00	00	0.00	07	18.40	31	81.60
As for the description of the correct techniques for removing masks.	00	0.00	00	0.00	07	18.40	31	81.60
As for the description of which fabric is indicated for making the homemade mask.	00	0.00	00	0.00	09	23.70	29	76.30

In Table 3, we can see that there was no agreement by the judges in the first assessment, and the CVI varied

between 0.935 and 0.939. In the second evaluation, however, the judges agreed on all items, and the CVI was 1.0.

**Table 3** - Content Validity Indexes made by the experts, obtained in the first and second item evaluation cycle in the manual “Guidelines for Health Professionals in Coping with COVID-19 in Primary Care”.

Content	1st evaluation	2nd evaluation
Is the content appropriate for the target audience?	0.921	1.000
Does the content present information relevant to the target audience?	0.954	1.000
Are the titles relevant?	0.941	1.000
Are the subheadings relevant?	0.947	1.000
Is the text sequence logical and coherent?	0.947	1.000
Does the content facilitate the teaching and learning process on the subject?	0.947	1.000
Is the vocabulary accessible to the target audience?	0.914	1.000
Is the text of the manual clear and objective?	0.934	1.000
Is the verbal language easy to assimilate?	0.934	1.000
Are the illustrations in the manual necessary to understand the content?	0.934	1.000
Do the illustrations motivate the manipulation of the printed material?	0.934	1.000
Do the illustrations elucidate the content?	0.941	1.000
Is the illustration quality appropriate for the content of the manual?	0.921	1.000
Is the content motivating?	0.954	1.000
Did the content catch your interest?	0.947	1.000
Did the content clarify doubts about the subject?	0.967	1.000
As for the description of the definition of COVID-19.	0.934	1.000
As for the description of the type of COVID-19.	0.934	1.000
As for the description of the signs and symptoms of COVID-19.	0.947	1.000
As for the description of measures to prevent COVID-19.	0.967	1.000
As for the description of the definition of PPE.	0.974	1.000
As for the description of the types of PPE recommended by the World Health Organization, which should be used by health professionals during the COVID-19 pandemic	0.961	1.000
As for the description of the correct techniques for putting on PPE (cap, goggles, apron, face shield, mask, glove).	0.967	1.000
As for the description of the technique for removing PPE: (cap, goggles, apron, face shield, mask, glove)	0.967	1.000
As for the description of the definition of the masks.	0.961	1.000
As for the description of the correct techniques for putting on the masks.	0.954	1.000
As for the description of the correct techniques for removing masks.	0.954	1.000
As for the description of which fabric is indicated for making the homemade mask.	0.941	1.000
<b>General CVC</b>	<b>0.946</b>	1.000

The final version of the manual “Guidelines for health professionals in coping with the COVID-19 pandemic in Primary Care” is gradually on the link to a University in the south of Minas Gerais. It contains

68 pages, including the cover, the back cover with the catalog sheet about the organizers, the collaborators, acknowledgments, a list of acronyms and abbreviations, the summary, the preface, the introduction, and the

seven chapters (Introduction, Pandemic resulting from infection by COVID-19, Recommendations for home care during the COVID-19 pandemic, Use of personal protective equipment by health teams, Algorithms, Leaflets, Guidelines to reduce the risk of infection by COVID-19)

and bibliographical references. The texts are in standard formatting size, 21 cm high by 15 cm wide. Each page has a maximum of 12 illustrations, totaling 152 illustrations, as explained in Figure 2 below.



**Figure 1:** Cover, Back cover, catalog sheet, summary of the Manual “Guidelines for Health Professionals in Coping with COVID-19 in Primary Care”.

## DISCUSSION

With the emergence of infectious diseases, especially COVID-19, professionals who assist patients affected by it are subject to a high risk of getting the disease. Several professionals have been contaminated because of the inadequate use of personal protective equipment. Because of that, several professionals faced fears, stress, and feelings of impotence, whether in the hospital or public health context<sup>11</sup>, making it necessary to develop protocols with measures that prevent accidents at work, seeking to promote more safety for professionals who provide this type of service.

Given this scenario, health organizations must offer personal protection equipment and devices to prevent contamination and, above all, to develop protocols and training to promote care free of harm and adverse events for the professional<sup>12</sup>.

The manual developed in this study was constructed after an integrative literature review, and the articles identified during the review report evidence-based studies. Evidence-based clinical practices have been defined as the conscientious, explicit, and judicious use of the best available evidence in clinical decision-making about the care of each patient<sup>13</sup>. Thus, the appropriate use of scientific evidence can guide clinical practice with benefits and harm reduction to professionals, patients, and the community.

Several studies recommend that manuals, booklets,

and protocols should be constructed, after reviewing the literature, clearly and objectively. Thus, the professional will develop educational material based on scientific subsidies, facilitating the implementation of clinical practice and the provision of systematized, individualized, and personalized assistance, with less risk and harm to the patient and without adverse events<sup>14,15</sup>.

The developed manual has high regard for health professionals since it presents the necessary subsidies to promote safety in the work environment. It provides guidelines for the professional who is on the front line of home care for people with COVID-19 to protect themselves from contamination with the virus while avoiding transmitting the infection to other individuals in the community.

The manual, when prepared with a scientific basis, reinforces information and oral discussions and assists in clinical decisions. Educational technologies, whatever the clinical situation, improve users' knowledge and satisfaction. Its content must have simple, clear, and easy-to-understand vocabulary<sup>15,16</sup>.

In this study, the evaluators assessed the content of the manual using the Delphi technique. Suggestions considered pertinent were accepted, which helped to avoid negative responses in the second evaluation cycle, increasing the reliability of the final instrument, as observed in other studies<sup>16,17</sup>.

This statement is confirmed by the analysis of



results after content validation by qualified professionals. We used the Delphi technique, which becomes a powerful investigation technique, as it allows to gather a set of geographically separated specialists' opinions, leading to dense results on complex and comprehensive themes<sup>18</sup>.

Several studies that validated the content of educational technology using the Delphi technique concluded that the evaluators' suggestions should be considered and corrected. This procedure contributes to a better understanding, effectiveness, and implementation of the material in the institution, allowing the target audience to understand the content of the material and be encouraged to use it<sup>14,19,20,21</sup>.

Achieving consensus is not always possible or desirable. Unlike other planning and forecasting methods, Delphi's purpose is not to arrive at a single answer or a consensus but to obtain the highest possible number of high-quality responses and opinions from a group of specialists to support decision-making<sup>22</sup>.

Therefore, after analyzing the data using the Content Validity Index tests, we found out that the content of the manual "Guidelines for Health Professionals in Coping with the COVID-19 Pandemic in Primary Care" has an excellent level of quality, which makes the manual an instrument suitable to be used by professionals.

The Content Validity Index is a method widely used in the health field. It measures the proportion or percentage of judges who agree on certain aspects of the instrument and its items. Initially, it allows analyzing each item individually and then the instrument as a whole<sup>23,24</sup>.

Concerning the limitations of the work development, we observed difficulty of quantifying the sample since the material and the respective questionnaire were made

available to several professionals, and the return was below expectations. That may be directly linked to the maximum peak of the pandemic in Brazil, when health professionals were directly involved in an exhausting workday with several other priorities at the time.

In this perspective, new approaches are needed and new research that refers to the post-pandemic scenario, in which these professionals will be fundamental in the necessary sampling for the development of highly relevant work.

## CONCLUSION

The manual "Guidelines for Health Professionals in Coping with the COVID-19 Pandemic in Primary Care" was developed and validated by professionals who are on the front lines in the fight against COVID-19.

The developed and validated manual reported in this study contributes to innovation for nurses, doctors, physiotherapists, and professionals who assist patients with infectious and contagious diseases. Especially helping in decision-making during home visits, with isolation guidelines social, technical, and the type of mask that must be used in the home or hospital environment and in the procedure of putting on and removing PPE during home visits. The information provided in the manual is important because, if the techniques are not used correctly, these professionals can be infected by COVID-19 and transmit it to patients, family members, and caregivers during home visits. In addition, it is expected that the instrument will provide subsidies to keep health professionals updated about the theoretical-practical approach to the content.

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