

**ONLINE NUTRITIONAL
SERVICE IN TIME
OF THE COVID-19
PANDEMIC:
CHALLENGES AND
POSSIBILITIES**

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Abstract: Nutritional teleservice begins to be allowed as a result of COVID-19, an infectious disease caused by the new coronavirus (SARS-CoV-2), and this work model was released by the CFN after the WHO declared COVID-19 a pandemic. As social isolation is the main preventive measure against the coronavirus, Information and Communication Technologies (ICTs) directly help the nutritionist's profession, who starts to attend online in order to comply with the health safety standards imposed by the disease. Therefore, this study sought to investigate the challenges and possibilities generated by online nutritional care in times of the COVID-19 pandemic. A virtual questionnaire consisting of semi-open open questions was carried out for 41 nutritionists on the various issues that involve the new type of care. As a result, most nutritionists were optimistic about the possibilities generated by teleconsultation, such as time and cost optimization and the possibility of providing care to people from other cities, other states and even other countries. Regarding the challenges, they reported the lack of physical assessment performed in the face-to-face consultation and the lack of a personal bond between professional and patient during online nutritional care. Finally, it is concluded that teleservice is a powerful tool for the present day and that professional nutritionists have shown themselves to be adept at the new modality. However, some modifications are necessary for the teleconsultation to work even better for both the nutritionist and the patient/client.

Keywords: Nutritionist. Teleconsultation. Teleservice. COVID-19. ICTs.

INTRODUCTION

Globalization is a process that has been happening increasingly in Brazil and in

the world. According to Manuel Castells (2002), this is closely linked to technological advances and has remarkable characteristics, one of which is the interaction that exists between the new information technology and the processes of social change in which an increase in use of technology in the health area (CASTELLS, 2002).

In this sense, due to technological advances and the constitution of a computerized society, many professions have adhered to the virtual model of work (DO CARMO, 1992). Among the professions that have adapted to technological advances, Nutrition stands out (PRADO, 2011).

To facilitate the work environment in the virtual environment, Information and Communication Technologies (ICTs) were created, ranging from the Internet itself to the tools it has (PEREIRA, 2010). In this scenario, it is worth mentioning that, despite technological advances permeating the nutritionist profession, until the year 2020, nutritional care was only allowed to occur in person, that is, not in virtual environments (Code of Ethics and Conduct of the Nutritionist, 2018).

In the year 2019, then, a new disease appears in the world, COVID-19. It is an infectious disease caused by the new coronavirus (SARS-CoV-2) that was first identified in Wuhan, China (PAHO, WHO, 2020). COVID-19 was declared by the World Health Organization (WHO) in March 2020 as a pandemic (BBC, 2020).

At first, even without the discovery of antiretroviral treatment to combat COVID-19, the Ministry of Health (MOH) established systematic measures to combat the disease. Among such measures, there are non-pharmacological ones such as: social distancing, respiratory and hand hygiene etiquette, use of masks, cleaning and disinfection of environments, isolation of

suspected cases and quarantine of COVID-19 cases (MINISTRY OF HEALTH, 2021).

Considering social isolation as a protective measure against COVID-19 according to Correia, Luck and Verner (2020), the Federal Council of Nutritionists (CFN) exceptionally decides to suspend article 36 of CFN Resolution No. of 2018, which says that it is the duty of the nutritionist to carry out the nutritional assessment and diagnosis of individuals in a face-to-face consultation and now allows nutritionists to provide nutritional care online (CFN, 2020).

Allowed by the CFN until the WHO declaration of the end of the pandemic by the new coronavirus (SARS-CoV-2), teleconsultation has become an important tool for many nutrition professionals and, for this to occur, the use of ICTs and The National Register of Nutritionists for Teleconsultation is established through the e-Nutricionista platform. The nutritionist who does not register on the aforementioned platform, but still attends online, may be penalized by the CFN (CFN, 2020).

The online environment can make the bond between professional and patient difficult, especially if the first appointment takes place virtually. In this sense, it is recommended that the applications used for teleconsultation include video calls, such as Skype, FaceTime, Zoom, HangOut, Join.me, Scribblar, Google Meet, given the importance of visual and audible contact during the service to improve the professional-patient bond (CAMPOS, 2020).

Observing the trend of using technology as a professional tool and in the face of the pandemic scenario, it becomes necessary and essential that health professionals who use ICTs act ethically and with respect to the profession (CAMARGO, 2012). In this sense, it is reinforced that it is the duty of the nutritionist to provide quality services using

ethical principles, albeit in an online format (Nutritionist Code of Ethics and Conduct, 2018).

METHODOLOGY

This is an exploratory, descriptive, qualitative and quantitative field research based on responses provided by Brazilian nutritionists to an online questionnaire, the main search tool for the study in question, which was released virtually. In the data analysis, descriptive statistics were performed to characterize the population and thematic categorization for the open questions.

As an inclusion criterion, the nutritionist needed to work in the clinical/outpatient area and/or sports clinics and perform online service at some point during the COVID-19 pandemic. As for exclusion criteria, it was sufficient for the nutritionist to be from other areas of activity other than clinical, outpatient and/or sports clinics; already be retired, without exercising professional practice; and being clinical and/or outpatient nutritionists who did not adhere to telecare during the COVID-19 pandemic.

With regard to ethical considerations, the present study was submitted to the zip code, through registration in the national online system Plataforma Brasil, registration number: 47638921.1.0000.5699, and received the status of approval.

RESULTS AND DISCUSSION

Through the research questionnaire, valid responses were collected from 41 nutritionists.

The nutritionists participating in the research have a mean age of 35 years (SD=9.4) and a mean training time of 8 years (SD=8.7). Of the professionals interviewed, 72.2% said they had specialization. In addition, these professionals work in different states of Brazil, such as Rio de Janeiro (61%), São Paulo

(12.2%), Minas Gerais (4.9%), Pernambuco (4.9%), Rio Grande do South (4.9%), Espírito Santo (2.4%), Alagoas (2.4%), Bahia (2.4%), Rondônia (2.4%) and even outside Brazil, in Carolina do North, in the United States of America (2.4%).

REGISTRATION ON THE E-NUTRITIONIST PLATFORM AND USE OF ICTS

The nutritionists were asked if they had registered on the e-Nutricionista platform, as instructed by the CFN. Among the responses, 65.8% of the professionals said they had registered on the platform and 34.1% said they had not.

The most used technological programs for online nutritional consultations were: Whatsapp, Zoom, Google Meet, Skype, Facetime and Dietbox, following the respective order from the most used (Whatsapp) to the least used (Dietbox).

From this perspective, professionals were asked if ICTs were valid tools today. For this question, 80.5% of the participants said yes and 19.5% said maybe.

It was possible to observe that the use of ICTs influenced the care of most professionals and many had to improve themselves to better deal with the new technologies and adapt them for teleservice, according to the report mentioned below.

“I had to use photographic records for anthropometric assessment. In addition to using audiovisual resources to guide the patient to perform some measures.” (Participant 1).

The answer of participant 1 of the survey represents the new reality of online service and how much technologies were and continue to be necessary in the current moment of the pandemic. And, in the answer of participant 2, it is possible to notice the citation of two ICT tools, in this case, Canva®, which is

the most popular digital content creation and design platform in recent times, and Whatsapp, a conversation application. mobile and computer snapshots:

“I created materials in Canva for broadcast lists and Whatsapp groups.” (Participant 2).

In addition, 63.4% of respondents said that, before the pandemic, they already had a web page for their services (Instagram, Website, Facebook and others) while 36.6% said they did not disclose their work on the networks before. of the pandemic.

MODIFICATIONS OF NUTRITIONAL CONSULTATION FOR THE VIRTUAL ENVIRONMENT

As for the changes in care when performed in a virtual way, most nutritionists interviewed responded that the most visible change was in relation to anthropometry, since the teleservice made it impossible for the measurement to be performed on patients.

“Anthropometric assessment only.” (Participant 3).

“I had to adapt mainly the nutritional assessment methods. It becomes more difficult to follow the patient’s evolution.” (Participant 4).

On the other hand, there were participants who answered the same question in the opposite way, as they reported not missing the anthropometric assessment carried out in the face-to-face consultation or who adapted to the impossibility of carrying it out:

“I didn’t change anything, since the focus of my care is not on anthropometry.” (Participant 5).

“I used indirect methods for physical assessment.” (Participant 6).

Another important change, and also frequently mentioned by the interviewees, was in relation to financial capital. Some

nutritionists reported that they invested in digital marketing during the COVID-19 pandemic period, others reported investing in electronic equipment and others, still, indicated that they invested much less for the online consultation than for the face-to-face consultation. He follows:

“ I needed good technical internet support; investment in a good quality camera, phone and microphone; adequate space for videoconferencing, choice of secure platform for making calls; and organization of electronic medical records in a safe way (such as cloud rescue, etc.).” (Participant 7).

“Investment in marketing and publicity materials.” (Participant 8).

“As I’m starting my career as a nutritionist and I really like working with online tools, for me, teleservice was a great opportunity. First, because we didn’t need to invest money initially in a face-to-face office and we were able to serve people from other cities and states easily. my acquisition of clients without having to spend a lot (Participant 9).

In the financial context, nutritionists were asked whether the value of their virtual consultations remained the same as that of face-to-face consultations. For this question, 56.4% of nutritionists said that the price of teleconsultation is the same charged for face-to-face consultation, 41% said that online consultation is cheaper and 2.6% said that teleconsultation costs more than face-to-face consultation.

EXPERIENCE OF CALL SERVICE, ADVANTAGES AND DISADVANTAGES

To experience nutritional care online was a challenge for many professionals. In addition to the contact with the patient/client having changed from one moment to another, the challenges related to the growing need to be “connected” were important factors in the

lives of nutritionists. This fact can be observed in the answers given by professionals to the following question: “What was it like, for you, to start the online service?”

“Challenging at first.” (Participant 10).

“Concern with the efficiency of the intervention; if I could “see” the patient even through a camera and if he would even understand me through a camera.” (Participant 11).

Despite the report that it was a great challenge for some, it was observed that most of the answers were positive to this question, as shown below.

“It was challenging but extremely wonderful. Honestly, I prefer this modality.” (Participant 12).

“Super interesting, because I was able to see patients from cities far away from mine.” (Participant 13).

“It was extremely important for financial maintenance mainly.” (Participant 14).

In this context, nutritionists were also asked about the advantages and disadvantages of telemarketing in their individual experiences. It is noted that there are two recurring advantages cited by the vast majority: financial savings and the possibility of serving people from other cities, other states and other countries. Regarding the disadvantages, it is observed that the most cited were the impossibility of physical assessment and the lack of closeness and personal bond with the patient:

“Advantages: serving people from all over Brazil, working from home and more flexible working hours. Disadvantages: incomplete anthropometry, lack of closer contact with the patient.” (Participant 15).

“Advantages: being able to serve people from all over the world, not depending on a physical location for care and consequently lower cost per consultation. Disadvantages:

not being able to perform the physical evaluation and depending on the patient's own evaluation or another professional.” (Participant 16).

PROFILE OF PATIENTS/CUSTOMERS SERVED ONLINE

Another interesting point generated in the research was the report that nutritionists gave about the profile of their patients/clients. Because nutritional telecare is something completely new, it was not possible to know, in advance, if patients/clients would have a good adherence to therapy, if they would maintain an interpersonal relationship with their nutritionists, or even if they would adhere to the virtual model of consultations. In this sense, the nutritionists questioned were able to answer what they had observed from their virtual consultations with regard to their patients/clients.

More than half of the nutritionists interviewed (51.2%) said that the number of patients/clients in their consultations increased during teleservice. While 31.7% of nutritionists said that they noticed a decrease in the number of patients/clients in their teleconsultations and 17.1% reported having neither an increase nor a decrease in the number of patients/clients when attended in a virtual way, since they maintained the same number as the face-to-face service.

With regard to adherence to therapy by patients/clients, 65.8% of nutritionists reported not having noticed any impairment in this aspect during teleservice and 34.1% noted impairment in adherence to therapy by patients/clients when attended in a virtual way.

When the question was the damage in the nutritionist-patient relationship, 58.5% of the nutritionists said that there was no damage in their relationships with patients/clients when attended online and 41.5% said that

they did feel this damage and, when asked if this damage was observed on a larger scale in patients of the first consultation, 69.6% said yes, that the damage in the nutritionist-patient relationship was greater in patients of the first consultation and 30.4% said no.

Another question about the patients' profile was the following: “Is there a difference in the teleservice of people in different life cycles (elderly, adult, child, adolescent)?” For this question, 73.2% of professionals said that there is a difference in the online consultation for different life cycles, 7.3% said they do not see this difference and 19.5% said that maybe there is such a difference.

PERSPECTIVES OF TELE CALL SERVICE

The last question of the present research raises the reflection on the future of nutritional care. The nutritionists interviewed were asked if they believe that teleservice is promising. The vast majority of professionals had positive answers to this question:

“Absolutely! The disadvantages of online service do not even compare to the wide range of advantages. In addition to being a great opportunity to strengthen the class and publicize our work.” (Participant 17).

“Yes, and I'll say more, it was the best thing that happened in this context we live in. A watershed, the turning point! I hope it continues!” (Participant 18).

“Very promising. I hope it is legally effective and it is up to each person and professional to decide which way to go.” (Participant 19).

A small portion expressed concern with the new type of service:

“It can be for those who want to attend online. It can be a differential for our class, yes. For me, in particular, no. I prefer face-to-face. Direct contact with the patient allows us to evolve much more.” (Participant 20).

And others bet on teleconsultation, but with adaptations:

“Yes, but in a hybrid way. The first meeting, face to face. The others, virtual.” (Participant 21).

Based on the results, it is possible to make a critical analysis of the challenges and possibilities of online nutritional care in times of the COVID-19 pandemic. The first analysis made is in relation to the possibility generated by the teleconsultation of the nutritionist being able to meet people from other parts of Brazil and the world. This possibility was only achieved due to the flexibility of the CFN for online consultations.

In order for the nutritionist to be able to perform the online service, the CFN legislation pointed out that an online registration on the e-Nutritionist platform (CFN, 2020) is necessary. However, it is worth mentioning that the data from this study show that only 65.8% of the professionals performed the proper registration. Despite not being the majority, the expressive percentage of nutritionists who did not register on the e-Nutricionista platform suggests a possible investigation into the reasons why they did not do so, whether there was any communication failure between the board and professionals and whether this requirement was well described for everyone.

Another advantage was the fact that nutritional teleservice reduces travel expenses to face-to-face consultations on both sides, in addition to optimizing time. Ferreira (2006) states that the optimization of expenses from the home office, a term in English that defines “work done from home” and widely used today in Brazil, including, as a result of the COVID-19 pandemic, occurs in a two-way street, both for the professional and for the client.

The main challenge of teleservice pointed out by the nutritionists surveyed was the lack of physical assessment, that

is, the impossibility of performing the anthropometric measurements of the patient. Comparing the present research with the study carried out by Costa (2020), it is possible to note that, in the impossibility of physical assessment, the nutritionists participating in the study by Costa (2020) resorted to the use of information reported by other professionals or by the patient himself.

Anthropometry is part of the direct assessment data and, in addition to them, there are indirect data that can be analyzed in a nutritional consultation, such as food consumption, socioeconomic conditions, food availability, among others (CRN-3, 2020). Therefore, in the impossibility of carrying it out, the nutritionist can make use of other methods of direct and also indirect analysis and “the collection of some data (such as biochemical tests, skinfolds, among others) will be optional in view of the measures restrictive measures adopted at the moment” (CFN-3, 2020). In addition to direct and indirect data, the CFN advises the professional to carry out a good and detailed anamnesis and to use ICT tools for this stage of the online consultation.

According to Lupton (2014), ICTs are very important tools for different spheres of society, including health. The implementations of information technologies are of extreme relevance, in contemporary times, for the promotion of health (LUPTON, 2014). Following this scenario, the present study proves these findings, as more than 80% of the professionals questioned in the survey said that ICTs play a fundamental role in nutritional care.

In their studies, Schmitz et al. (2017) believe that teleconsultation is a facilitating means for both health professionals and patients, and demonstrate that online care, in many cases, has the same quality potential

as face-to-face care, in addition to reducing costs. Also in this sense, the authors point out the advantages that other parts of the world have for having already regularized teleservice. These mentioned advantages are also identified in the present study.

In a research carried out in Salvador (BA) by Alves et al. (2020) demonstrated that teleconsultation was very useful both for professionals and for patients seen by nutritionists. The study showed that, surprisingly, ICTs increased the bond between the team and the interaction with patients. Furthermore, Alves et al. (2020) credited the effectiveness of health promotion through virtual channels during the period of the COVID-19 pandemic. Such facts are in agreement with the data pointed out in the described research.

The present study had as a limiting factor the low number of responses due to the short time of the academic calendar in remote academic periods. And, as the number of research participants was not so large, this made it difficult to collect data from a considerable number of nutritionists working in specific areas, such as Maternal and Child Nutrition and Nutrition in Gerontology, and these areas, because they deal with of audiences at different stages of life, it was expected to encounter greater challenges than in the others.

In addition, it is worth mentioning that, as it is an extremely recent subject, there are not many studies yet that can be used to compare the results of the research in question.

FINAL CONSIDERATIONS

In addition to the difficulties and uncertainties in the social, economic, educational and health scenario, the pandemic of the new coronavirus brought with it great challenges, especially for the health area. As a result of social isolation, ICTs grew abruptly, significantly at the beginning of the pandemic. It was noted that there was an emerging demand for technology adaptation by professionals who, prior to the current circumstances, did not consider their use. This reflection was seen in the nutritionist's profession, who suddenly needed to connect to new tools to be able to carry out their care. The CFN, in turn, also needed to expand the service possibilities for the virtual environment and adapt its resolutions to the new world scenario.

Finally, the practice of nutritional teleservice presents challenges, however, it has many advantages, as demonstrated in the study in question. It is suggested that such advantages be considered for a possible change in the Code of Ethics and Conduct for Nutritionists.

In addition, the importance of considering the accumulated experience of nutritionists who attended online in this period is highlighted, regarding the prospects of nutritional teleservice in the near future. For this, research with a larger number of professionals is necessary, aiming to identify this scenario and make possible adjustments that add to the category and to patients/clients of nutrition.

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