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Telenursing in the home care service in COVID-19 pandemic: a cross-sectional study

Teleconsulta no serviço de atenção domiciliar na pandemia da COVID-19: estudo transversal

Teleenfermería en el servicio de atención domiciliaria la pandemia COVID-19: estudio transversal

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ABSTRACT

Objective: to identify the nursing interventions performed by telenursing to the elderly and their caregivers in the Home Care Service (SAD) during the COVID-19 pandemic. **Method:** cross-sectional study of nursing interventions performed with 140 elderly and 106 caregivers, located in the city of São Gonçalo, in the state of Rio de Janeiro. Therefore, a semi-structured instrument was developed based on the nursing diagnosis of Frailty Syndrome, Risk of contamination, and Caregiver role strain of the NANDA-I Taxonomy, NIC nursing interventions and activities, and on the Coronavirus Clinical Management Protocol (COVID-19) in the Primary Health Care of the Ministry of Health. **Results:** in 66.4% of the cases, there was a change in the routine to suit the care of the elderly, with no significant difference for the elderly over 85 years old; 53.6% had difficulties in maintaining social isolation, and 49.3% in performing hygiene care. In 95.7%, the intervention performed was "teaching the elderly and caregivers about health care maintenance strategies to reduce contamination". **Conclusion:** the use of telecare associated with visits that became an exception during the pandemic is recommended, providing continuity of care in the Home Care Service. These strategies help to maintain the functional capacity of the elderly, to control the stress of the caregivers, and to adopt measures of social isolation.

DESCRIPTORS: Telenursing; Home Care Services; Geriatric Nursing; Pandemics; COVID-19.

RESUMO

Objetivo: identificar as intervenções de enfermagem realizadas por teleconsulta ao idoso e seu cuidador no Serviço de Atenção Domiciliar (SAD) na pandemia da COVID-19. **Método:** estudo transversal das intervenções de enfermagem realizadas com 140 idosos e 106 cuidadores, no município de São Gonçalo-RJ. Para tanto, elaborou-se um instrumento semiestruturado fundamentado nos diagnósticos de enfermagem Síndrome do Idoso Frágil, Risco de contaminação e Tensão do papel do cuidador da Taxonomia da NANDA-I, intervenções e atividades de enfermagem NIC e no Protocolo de Manejo Clínico do Coronavírus (COVID-19), na Atenção Primária à Saúde do Ministério da Saúde. **Resultados**: em 66,4% dos casos houve mudança na rotina para se adequar ao cuidado do idoso, sem diferença significativa para os idosos com mais de 85 anos; 53,6% tiveram dificuldades em manter o isolamento social e 49,3%, em realizar cuidados de higiene. Em 95,7%, a intervenção realizada foi "ensinar ao idoso e cuidador estratégias de manutenção dos cuidados de saúde para diminuir a contaminação". **Conclusão**: recomenda-se o uso do telecuidado associado às visitas que se tornaram excepcionalidade na pandemia, dando continuidade ao cuidado no SAD, que auxilia na manutenção da capacidade funcional do idoso, no estresse do cuidador, e na adoção de medidas de isolamento social.

DESCRITORES: Telenfermagem; Serviços de Assistência Domiciliar; Enfermagem Geriátrica; Pandemias; COVID-19.

RESUMEN

Objetivo: identificar las intervenciones de enfermería realizadas por medio de la teleasistencia a los adultos mayores y sus cuidadores en el Servicio de Atención Domiciliaria (SAD) durante la pandemia de COVID-19. **Método**: estudio transversal de las intervenciones de enfermería realizadas con 140 adultos mayores y 106 cuidadores en la ciudad de São Gonçalo, RJ. Para ello, se desarrolló un instrumento semiestructurado que se basa en los diagnósticos de enfermería Síndrome del Anciano Frágil, Riesgo de contaminación y Estrés del rol de cuidador de la Taxonomía NANDA-I, intervenciones y actividades de enfermería NIC y en el Protocolo de Manejo Clínico del Coronavirus (COVID-19), en la Atención Primaria de la Salud del Ministerio de Salud. **Resultados**: en el 66,4% de los casos se realizaron cambios en la rutina para adecuarse al cuidado del adulto mayor, no hay diferencia significativa en el adulto mayor de 85 años; el 53,6% tuvo dificultades para mantener el aislamiento social y el 49,3% para realizar los cuidados higiénicos. En el 95,7%, la intervención realizada fue "enseñarles a los adultos mayores y cuidadores estrategias para mantener el cuidado de la salud para reducir la contaminación". **Conclusión**: se recomienda el uso de la teleasistencia junto con las visitas que se convirtieron en una excepción durante la pandemia, posibilitando la continuidad del cuidado en el SAD, que ayuda a mantener la capacidad funcional del adulto mayor, a manejar el estrés del cuidador y a adoptar medidas de aislamiento social.

DESCRIPTORES: Teleenfermería; Servicios de Asistencia Domiciliaria; Enfermería Geriátrica; Pandemias; COVID-19.

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INTRODUCTION

The World Health Organization was informed, on December 31, 2019, that in the city of Wuhan, in Hubei Province, China, there were cases of pneumonia of unknown etiology. Just 12 days later, Chinese officials from China's National Health Commission informed the WHO, which confirmed worldwide, that they had discovered a new type of Coronavirus circulating in the country[1].

Coronavirus (CoV) has been known to science since the mid-1960s and is part of a large family of viruses[1]. They are generally associated with flu-like syndromes and their symptoms of infection range from a common cold to severe respiratory syndromes, such as SARS (Severe Acute Respiratory Syndrome)[1,2]. What has changed in the 2019/2020 scenario is that the cases are related to a new variant of this virus, called Severe Acute Respiratory Syndrome Coronavirus-2 (Sars-Cov-2), and the disease is called Coronavirus Disease-19 (COVID-19)[2,3].

On February 3, 2020, the Brazilian Ministry of Health declared a Public Health Emergency of National Concern as a result of the world scenario and established a Public Health Emergency Operations Center, under the responsibility of the Secretariat of Surveillance in Health (SVS/MS)[2]. On March 11, 2020, the WHO declared it as a World Pandemic, and the first confirmed case of death in Brazil occurred on March 17, 2020, with a 62-year-old man diagnosed with diabetes and hypertension[1,2]. Since then, the elderly are considered the main risk group, and social isolation measures were recommended, with restrictions on visits by the Home Care Service.

The Home Care Service (SAD) is part of the Health Care Network (RAS) of urgency and emergency. This service is suitable for people of any age group who have "clinical stability when bedridden or under home restriction, temporarily or permanently or in a degree of vulnerability, in which home care is considered the most appropriate treatment, palliation, rehabilitation, and disease prevention offer, with a view to expanding the autonomy of the user, family, and caregiver"[4]. However, the elderly are the main users of this service, which is concerned with the elderly dependent on care and the elderly over 85 years old, who are at increased risk of frailty, and consequently at risk for severe cases of COVID-19[7].

Therefore, due to the global pandemic situation, it was necessary to develop strategies to offer the continuity of distance health care in compliance with the national decree of social isolation. And, in an attempt to contain the advance of the disease, the Federal Council of Nursing, through resolution No. 0634/2020, regulates ad referendum nursing teleconsultation so that nurses can contribute to facing and fighting the pandemic, through appointments, explanations, referrals and guidelines with the aid of technology[5].

Teleconsultation is part of telecare, which is a type of health technology that defines the use of telecommunication and computer technologies to monitor adults and elderly people at home, with the provision of nursing care through calls, video calls, remote

appointments and/or mobile messaging. Easy access to smartphones has profoundly changed the way individuals use technology[6], offering the opportunity of promoting health through interventions that can take place in the most relevant time and place for the individual, using technologies such as the telephone they already have and are familiar with[5].

Therefore, telecare in the context of the pandemic is relevant, as it can contribute to the reorganization of care for the elderly and caregivers in the SAD. In addition, it can provide quick access to information on the general health status of the elderly and caregivers, enable technical and scientific conditions to intersperse the traditional weekly visits with the support call, and also make nursing interventions regarding the clinical management of COVID- 19 and other health conditions.

Therefore, this study is aimed at identifying the nursing interventions performed by telenursing to the elderly and their caregivers in the Home Care Service (SAD) in the COVID-19 pandemic.

METHOD

Ethical aspects

The study was approved by the Research Ethics Committee of the Hospital Universitário Antônio Pedro (HUAP) and by the Co-Participant Institution, the Municipal Health Department of São Gonçalo, under Opinion No. 4,716,030, as per the Recommendations of Resolution 466/12 of the National Health Council.

Study design, period and place

This is a cross-sectional study of nursing interventions made in the primary care during the COVID-19 pandemic using the Telenursing resource, developed at the SAD in the city of São Gonçalo, in the state of Rio de Janeiro, Brazil, from March 25, 2020 to April 9, 2020.

The Home Care Service of São Gonçalo has its own headquarters and covers the whole city. It is composed of 10 Multiprofessional Home Care Teams (EMAD) and 4 Multiprofessional Support Teams (EMAP). The EMAD consists of a physician, nurses, nursing technicians, a social worker, and a physical therapist in each team. EMAP, on the other hand, is composed of a psychologist, a nutritionist, a pharmacist, and a speech therapist.

The municipality of São Gonçalo has the second largest population in the state of Rio de Janeiro, with an estimated population of 1,084,839 inhabitants in 2019, distributed in a territorial area of 248.160 km^2[8] and in five districts. Regarding age group, there is a gradual increase in the population aged 65 and above, characterizing the aging of the population. Between 2000 and 2010, the aging rate evolved from 6.05% to 7.97% and the aging rate is 70.94%. The municipality has a population of 148,839 elderly people, corresponding to 13.72% of the total population[8,9].

Sample, research team, and inclusion and exclusion criteria

Currently, the SAD has 392 people registered, of which 303 are elderly. In the moment of randomization, the list was divided into two, and the research team, consisting of two

fellows, one from scientific initiation and the other from technological initiation, carried out the sample selection. One called the first elderly person on the list and the other called the fifth and so on. They took notes and then two nurses from the team, a specialist in primary care and another in gerontology, made the intervention.

The focus was to randomly find elderly people who answered the calls during the collection period in the five districts of the city. The sample was distributed as follows: in the 1st district with 111 elderly, corresponding to 30 neighborhoods of the city, 55 elderly were assisted; in the 2nd, with 51 elderly people, 19 neighborhoods, 25 were assisted; in the 3rd district, with 18 neighborhoods, there were 76 elderly people, of whom 34 were assisted; the 4th had 51 elderly people, 13 neighborhoods, of whom 18 were assisted; the 5th district was composed of 10 neighborhoods, 14 elderly, of whom 8 were assisted. Therefore, the sample consisted of 140 elderly people of both sexes, enrolled in the Home Care Service in the city of São Gonçalo, corresponding to 46.2% of the total sample.

Inclusion criteria: elderly aged 60 years and above, assisted by the SAD of the municipality of São Gonçalo; having a phone or cell phone available. Caregiver: being responsible for the elderly; registration as a caregiver in the SAD eligibility form; having cognitive ability to respond with orientation in time and space in the communication with the researcher; having a phone or cell phone available.

Exclusion criteria: Discharge after hospitalization or death identified at the time of the phone call.

Study protocol

The call used as instrument was systematized in accordance with the legal professional attributions of the nurses[10,11], based on the nursing diagnosis of Frail Elderly Syndrome, Risk of contamination, and the caregiver role strain in the NANDA-I Taxonomy[12], and in the NIC nursing interventions and activities[13] aimed at diagnoses, and in the Coronavirus Clinical Management Protocol (COVID-19) in the Primary Health Care of the Ministry of Health[14] (Supplement I).

It is noteworthy that the questions of a call must be prepared with simple, open, and easy-to-understand language so that there is clarity in the dialogue between patient and nurse: "How is the care of the elderly person at home in times of social distance to prevent the coronavirus?; How do you feel about the care provided to the elderly during this time of pandemic?; How is the health of the elderly and family members?; Has there been a change in the routine to suit the care of the elderly and the caregiver?; Do you have any difficulty in taking care of the elderly?; Did the elderly person develop any different behavior during social distancing?; Do you have any questions?"

In the instrument, each question was associated with a nursing diagnosis and its possible answers, that is, clinical indicators, were marked at the time of the appointment. Then, depending on the answer, the nurses could intervene, and the nursing activities or prescriptions were carried out according to the researcher's assessment. Then, during the phone call, relevant data about the care

routine, flu syndrome, and social isolation of the elderly and caregivers were obtained, and the appropriate interventions were made.

When clinical and emotional instability, and it was update of conduct were identified at the time of the call, the research team made direct contact with the SAD requesting an immediate in-person visit.

Analysis of results and statistics

From the data collection, a database was built based on spreadsheets that were analyzed by the SPSS (Statistical Package for Social Science) program, version 22.0, New York, United States, and by the Microsoft Excel 2016 application made available for free by Google on Google Drive. The database contained the sample's characterization data and the analysis of interventions made by telephone. The analysis was stratified into 60 to 84 years old and 85 years old or above because of increased risk of frailty in those above 85 years old, in order to assess whether there was a difference between groups. To verify a significant association between two variables, the Chi-Square Test was used or, when the Chi-Square test was inconclusive, if possible, the Fisher's Exact Test was used. In the Inferential Analysis of a quantitative variable, the comparison of the distribution of the quantitative variable of two independent groups was made using the non-parametric Mann-Whitney test.

RESULTS

Table 1 shows the frequency distributions of variables that characterize globally and by age group the 140 elderly people and the 106 caregivers who use the service.

Table 1 - Characteristics of users globally and by the elderly age group. São Gonçalo, RJ, Brazil, 2020

Variable	Global (n=140)		Age under 85 years old (n=107)		Age equal to or above 85 years old (n=33)		p-value comparing the two groups
	n	%	n	%	n	%	
Age (years)							
60 |-65	18	12.9	18	17.5	0	0.0	
65 |- 70	24	17.4	24	23.3	0	0.0	
70 |- 75	27	19.3	27	26.2	0	0.0	
75 |- 80	21	15.0	21	20.4	0	0.0	**<0.001**[a]
80 |- 85	17	12.4	17	16.5	0	0.0	
85 |- 90	16	11.3	0	0.0	16	48.5	
90 |- 95	12	8.6	0	0.0	12	36.4	
95 |- 100	3	2.1	0	0.0	3	9.1	
100 |- 105	1	0.7	0	0.0	1	3.0	
105 |- 110	1	0.7	0	0.0	1	3.0	
Sex							

Female	90	64.3	66	61.7	24	72.7	0.247[b]
Male	50	35.7	41	38.3	9	27.3	
Caregiver							
No caregiver	34	24.3	30	19.42	4	12.1	**0.004**[c]
Children	**67**	**47.9**	**44**	**42.72**	**23**	**69.7**	**0.004**[b]
Spouse	29	20.7	26	25.24	3	9.1	0.066[b]
Others	10	7.1	7	6.80	3	9.1	0.700[c]
Comorbidities							
HBP	**77**	**55.0**	**64**	**59.8**	**13**	**39.4**	**0.039**[b]
DM	51	36.4	45	42.1	6	18.2	**0.013**[b]
Stroke	30	21.4	24	22.4	6	18.2	0.603[b]
Varicose ulcer	30	21.4	21	19.6	9	27.3	0.349[b]
Pressure injury	17	12.1	13	12.1	4	12.1	1.000[c]
Alzheimer's disease	11	7.8	6	5.6	5	15.2	**0.044[c]**
Uses GT	6	4.3	5	4.7	1	3.0	1.000[c]
Heart disease	6	4.3	3	2.8	3	9.1	0.143[c]
Amputation	4	2.9	3	2.8	1	3.0	1.000[c]
Bedridden	4	2.9	1	0.9	3	9.1	**0.041[c]**
Rehabilitation	2	1.4	1	0.9	1	3.0	0.417[c]
Fracture of lower limb	2	1.4	1	0.9	1	3.0	0.417[c]
Number of people living in the house							
Lives alone (1)	25	2.1	21	2.8	4	12.1	
2	**39**	**27.9**	**34**	**31.8**	**5**	**15.2**	
3	19	13.6	15	14.0	4	12.1	
4	**38**	**27.1**	**28**	**26.2**	**10**	**30.3**	**0.043**[a]
5	19	13.6	16	15.0	3	9.1	

(a) Mann-Whitney test; (b) Chi-square test; (c) Fisher's Exact test.

Source: Elaborated by the authors, 2020.

Table 2 shows the frequency distribution of the state of the caregiver and the elderly at the time of the telenursing consultation.

Table 2 - State of the caregiver and the elderly. São Gonçalo, RJ, Brazil, 2020

Variable	Global		Age under 85 years old		Age equal to or above 85 years old		p-value
	F	%	F	%	F	%	
Caregiver Difficulties							
Concern	4	2.8	2	1.8	2	6.0	1.000[c]

Aches	1	0.7	0	0.0	1	3.0	0.236(c)
Anxiety	2	1.4	1	0.9	1	3.0	1.000(c)
Pneumonia	1	0.7	1	0.9	0	0.0	1.000(c)
Overloaded	3	2.1	1	0.9	3	9.0	1.000(c)
Complaints about the elderly							
Cough	7	4.9	6	5.4	1	3.0	1.000(c)
Difficulty in swallowing	1	0.7	0	0.0	1	3.0	0.236(c)
Aches	5	3.5	3	2.7	2	6.0	1.000(c)
Running nose	6	4.2	5	4.5	1	3.0	1.000(c)
Fever	1	0.7	1	0.9	0	0.0	1.000(c)
Infection (antibiotic use)	1	0.7	1	0.9	0	0.0	1.000(c)
Elderly person vaccinated against flu							
No	92	65.7	68	63.6	24	72.7	0.332(b)
Yes	48	34.3	39	36.4	9	27.3	
Caregiver vaccinated against flu							
No	82	58.6	68	63.6	14	42.4	**0.043(c)**
Yes	22	15.7	17	15.9	5	15.2	
Not eligible	36	25.7	22	20.6	14	42.4	

(b) Chi-square test; (c) Fisher's exact test.

Source: Elaborated by the authors, 2020.

It is noteworthy that the elderly with symptoms were monitored, and the caregiver was instructed to contact the team in case of any worsening of symptoms. They were also responsible for communicating symptoms related to the flu vaccination; history of allergic cough; longtime smoking. Moreover, the elderly person who reported fever, whose degree of dependence on the caregiver was total, received a visit from the EMAD team of the Home Care Service, which identified that the elderly person needed hospitalization, referring him to the reference hospital, where he remained hospitalized due to acute pancreatitis for five days. And after the condition improvement, he was discharged from the hospital, returning to the care of the Home Care Service. Family members of the elderly who participated in the telenursing during this first contact did not show symptoms of COVID-19.

Table 3 shows the distribution of responses on Care for the Elderly and Feelings during the COVID-19 Pandemic and the interventions made during telenursing globally and by age group.

Table 3 - Care for the Elderly and Feelings at a time of pandemic and interventions made during telenursing globally and by age group. São Gonçalo, RJ, Brazil, 2020

Variable	Global		Age under 85 years old		Age equal to or above 85 years old		p-value
	F	%	F	%	F	%	
How is the care of the elderly?							
It goes smoothly	**124**	**88.6**	**96**	**89.7**	**28**	**84.8**	**0.531[b]**
I can perform all activities planned for the day	52	37.1	38	35.5	14	42.4	0.473[b]
Tiring	12	8.6	9	8.4	3	9.1	1.000[c]
Mental stress	8	5.7	5	4.7	3	9.1	0.392[c]
Busy	3	2.1	2	1.9	1	3.0	0.557[c]
Worrisome	2	1.4	1	0.9	1	3.0	0.417[c]
No food or groceries	1	0.7	1	0.9	0	0.0	1.000[c]
No medicines	1	0.7	0	0.0	1	3.0	0.236[c]
Interventions made							
Used a calm/soothing approach	**71**	**50.7**	**52**	**48.6**	**19**	**57.6**	**0.428[b]**
Encouraged the verbalization of feelings, perceptions, fears	64	45.7	49	45.8	15	45.5	1.000[b]
Provided the caregiver with realistic information about aspects of the elderly care	53	37.9	41	38.3	12	36.4	0.840[b]
Assessed the possibility of alternating care	47	33.6	33	30.8	14	42.4	0.218[b]
Encouraged the caregiver's dialogue with family members about care	42	30.0	32	29.9	10	30.3	1.000[c]
Explained how the system of the EMAP health care network worked	13	9.3	8	7.5	5	15.2	0.184[c]
Feeling while providing care for the elderly in the pandemic							
Calm/smooth	**100**	**71.4**	**79**	**73.8**	**21**	**63.6**	**0.2757[b]**
Satisfied	56	40.0	36	33.6	20	60.6	**0.006**[b]
Overloaded	8	5.7	6	5.6	2	6.1	1.000[c]
Tired	8	5.7	7	6.5	1	3.0	0.447[c]
Worried	6	4.3	4	3.7	2	6.1	0.626[c]
Anguished	5	3.6	3	2.8	2	6.1	0.337[c]
Insecure	3	2.1	1	0.9	2	6.1	0.138[c]
Sad	2	1.4	1	0.9	1	3.0	0.417[c]
Exhausted	1	0.7	0	0.0	1	3.0	0.236[c]
Stressed	1	0.7	0	0.0	1	3.0	0.236[c]
Afraid	1	0.7	0	0.0	1	3.0	0.236[c]

Interventions made							
Encouraged leisure activities at home	**112**	**80.0**	**88**	**82.2**	**24**	**72.7**	**0.182 (b)**
Encourage online family participation as appropriate	55	39.3	42	39.3	13	39.4	0.988 (b)
Helped the caregiver when the burden became evident	45	32.1	33	30.8	12	36.4	0.670(b)
Requested services from other health professionals	18	12.9	12	11.2	6	18.2	0.371 (c)
Explained how the system of the EMAP health care network worked	17	12.1	12	11.2	5	15.2	0.762 (c)

Source: Elaborated by the authors, 2020.

The emotional state of care for the elderly during the COVID-19 pandemic focuses on keeping everything calm and smooth (71.4%), and this was reinforced in 50.7% of the calls. The intervention in 80% of calls is noteworthy for encouraging the performance of leisure activities safely at home.

Table 4 details the telenursing interventions to maintain life and hygiene care during the COVID-19 pandemic.

Table 4 - Telenursing interventions to maintain life and hygiene care in times of the COVID-19 pandemic. São Gonçalo, RJ, Brazil, 2020

Variable	**Global**		**Age under 85 years old**		**Age equal to or above 85 years old**		**p-value**
	F	**%**	**F**	**%**	**F**	**%**	
There was a change in the routine for elderly care during the pandemic	**93**	**66.4**	**70**	**65.4**	**23**	**69.7**	**0.649(b)**
Social isolation	**75**	**53.6**	**59**	**55.1**	**16**	**48.5**	0.503(b)
Hygiene	**69**	**49.3**	**50**	**46.7**	**19**	**57.6**	0.276(b)
Transfer: getting up or walking	4	2.9	2	1.9	2	6.1	0.236(c)
Dressing	2	1.4	2	1.9	0	0.0	1.000(c)
Feeding	2	1.4	0	0.0	2	6.1	0.054 (c)
Interventions							
Explained the difference between flu and coronavirus and the protection the vaccine offers	66	47.1	48	44.9	18	54.5	0.330(b)
Taught the caregiver strategies to maintain health care to reduce contamination	**134**	**95.7**	**102**	**95.3**	**32**	**97.0**	1.000(c)

Advise to maintain their own physical and mental health	73	52.1	58	54.2	15	45.5	0.379[b]
Determined the need for improvements at home to compensate for hygiene and mental health	52	37.1	38	35.5	14	42.4	0.473[b]
Determined the needs for changes related to security at home	45	32.1	34	31.8	11	33.3	0.867[b]
Guided on suitable conditions for living with the elderly	27	19.3	18	16.8	9	27.3	0.183[b]
Encouraged independence but advised assisting the patient when necessary	2	1.4	2	1.9	0	0.0	1.000[c]
Determined the mental and cognitive capacity of the elderly	1	0.7	1	0.9	0	0.0	1.000[c]
Supported the caregiver in setting limits	1	0.7	1	0.9	0	0.0	1.000[c]
Taught the caregiver health care maintenance strategies to maintain their own physical and mental health	2	1.4	1	0.9	1	3.0	0.417[c]
Advised the caregiver regarding the occurrence of signs and symptoms of diarrhea, constipation, and fecal impaction and incontinence	1	0.7	1	0.9	0	0.0	1.000[c]
Guided the caregiver to monitor the condition of the mouth of the elderly	1	0.7	0	0.0	1	3.0	0.236[c]
Guided the caregiver to correctly position the elderly	2	1.4	0	0.0	2	6.1	0.054 [c]
Advised the caregiver to observe non-verbal cues of discomfort, such as facial expressions and excessive movement	2	1.4	1	0.9	1	3.0	0.417[c]
Guided the caregiver on controlling environmental factors of discomfort	1	0.7	1	0.9	0	0.0	1.000[c]
Guided change of position every 2 hours, protecting bony prominences and avoiding edema	4	2.9	2	1.9	2	6.1	0.236[c]
Advised the caregiver to keep the bed of the elderly clean and with sheets stretched to avoid tension on wounds and shear at the time of mobilization	3	2.1	2	1.9	1	3.0	0.557[c]

Source: Elaborated by the authors, 2020.

For 66.4% of the cases, there was a change in the routine to suit the care of the elderly, with no significant difference for the two age groups, that is, the one above 85 years old (p-

value=0.649 according to the Chi-square test). As expected, the greatest difficulties were centered on maintaining social isolation (53.6%) and following the standards of personal and environmental hygiene (49.3%), and therefore, the implementation of the intervention "Taught the caregiver strategies maintenance of health care to reduce contamination by COVID-19" (95.7%) to this target audience was relevant.

The purpose was to investigate whether the elderly showed changes in behavior during social distancing, and the most frequent change was agitation, found in only 5% of cases, in 7 elderly, 4 under 85 (3.7%) and 3 above 85 (9.1%). These were associated with confusion (1.4%), sadness, and orientation disorders (0.7%), all cases among the elderly under 85. Therefore, the most common interventions made were: "encouraged the use of techniques to calm down, such as putting on the elderly's favorite songs, touching him/her and being present"; "Allowed the elderly to maintain some of their rituals to limit anxiety"; "Provided orientation in time, space and person; stimulated cognition; Kept a well-lit environment that reduces sharp contrasts and shadows, among others, for dementia control".

At the end of the Telenursing, participants were asked about doubts, the most common being about vaccination (5.7%); dressing (1.4%); test results (1.4%); diet care (0.7%); return of in-person care by the SAD (1.4%) due to the need for physiotherapy and nutritionist. There were no differences in the two age groups of old people who were 85 years or more (p=0.355). Also, during telephone follow-up, it was possible to assess that 5 (3.6%) elderly people needed care by a Multidisciplinary Team due to clinical instability; 3 (2.1%) needed prescriptions and reports, and two needed dressings. The research team contacted the SAD EMAD, which the users at home and evaluated them according to the information previously provided by the research team. The team was able to provide the necessary materials.

Finally, it is worth mentioning Table 5, which brings the main statistics regarding the call duration of the telenursing consultation.

Table 5 - Main statistics of telenursing appointment duration. São Gonçalo, RJ, Brazil, 2020

Duration (minutes)	**Global**		**Age under 85 years old**		**Age equal to or above 85 years old**		**p-value comparing the two groups**
	F	**%**	**F**	**%**	**F**	**%**	
5 | 15	**81**	**57.7**	**65**	**60.7**	**16**	**48.6**	**0.063**
15 | 25	49	35.0	37	34.5	12	36.3	
25 | 35	7	4.9	2	1.8	5	15.1	
35 | 45	1	0.7	1	0.9	0	0.0	
45 | 55	1	0.7	1	0.9	0	0.0	
105 | 110	1	0.7	1	0.9	0	0.0	

Mean	14.9	14.4	16.4
Median	13.0	13.0	15.0
Standard deviation	10.3	11.0	7.3
CV	0.69	0.76	0.45

Source: Elaborated by the authors, 2020.

The typical time for calls was 5 to 15 minutes (57.7%), with an average of 14.9 minutes and a median of 13.0 minutes. Based on the values of the coefficients of variation (CV=0.69), call duration showed high variability around the mean, with the variability being greater in the group under 85. The distributions of call duration in the age subgroups were compared using the Mann-Whitney test (p=0.063), which leads to the conclusion that there is no significant difference between call duration for the elderly in the two age groups, and that call duration is more related to the need for support and the degree of dependence of the elderly.

DISCUSSION

The main data of this study is the survey of the need for continuity of care for the elderly in the SAD with the delimitation of the main nursing interventions/activities applied by Telenursing, which can support other health professionals to develop their actions.

The main emphasis on interventions in the fight against the COVID-19 Pandemic was "taught the caregiver of health care maintenance strategies to reduce contamination". It demonstrates how the pandemic interfered in daily care, in changing the routine of activities and in hygiene habits, and the relevance of nurses in investigating and intervening in the Contamination Risk Diagnosis in the fight against the pandemic [15].

However, the impact of social isolation, is a fundamental issue to reduce and prevent contamination, on the mental health of caregivers and the elderly must be considered. Some elderly people, despite their dependence and need for care, live alone and depend on the visit of the SAD, friends, or neighbors. The biggest challenges found in this study were guiding elderly people living alone and without caregivers, as health professionals and the social care network have to consider and weigh the risks of contamination in the Pandemic and the risk of isolation[1,2,7]. Although having a caregiver was a criterion for admission to the SAD, elderly people are known to be at risk of social vulnerability until they have another care center as a Long-Term Institution for the Elderly, and this shows the reality of precariousness of the health care of the elderly in Brazil[16].

Likewise, in households with adults who need to break isolation to work, caregivers and the elderly people get worried, and extra attention should be given to hygiene measures[14]. The well-being of the elderly and caregiver was guided by the diagnosis of Caregiver Role Strain, the most common complaint being concern for the elderly[17,18]. These data corroborate studies on quality of life and caregiver burden, especially family members,

which report on emotional discomfort and tension, and nervousness with the loved ones since most caregivers are their children[7,19]. Despite all the effort put in the organization to vaccinate the elderly at home against the flu, the insecurity in receiving the teams and anxiety have led to low adherence to vaccination, so continuous guidance from the nursing team is necessary.

The profile of the elderly treated at the SAD showed a mean age of 77 years old with a minimum of 60 and a maximum of 110 years, typically female, with chronic diseases, who received care from their children. This typical profile corroborates the theoretical foundation of nursing interventions for the Frail Elderly Syndrome Diagnosis, which allows for a multidimensional perspective of the elderly, something essential from a gerontological perspective, thus contributing to the analysis of criteria beyond biological age and multipathologies, providing an opportunity for expanded view of the aging process, considering the impact of functional capacity and dependence[7,19,20].

However, telephone calls are an important source of support and interaction between the family, caregivers, and health providers, therefore promoting a closer bond between the health team and the family. This is corroborated in other studies that used this type of intervention, such as telecare to promote self-care in Diabetes Mellitus[21] and support for breastfeeding[22], which also obtained results of support and continuity in care[23]. However, telenursing aimed at health promotion and disease prevention has the potential for good personal care practices in times of the COVID-19 pandemic as support in the imposition of social isolation.

CONCLUSION

The conclusion is that the interventions and guidelines given to the elderly, caregivers and their families were mainly related to the maintenance of personal and environment hygiene due to the risks of infection by the new coronavirus, social isolation, maintenance of functional capacity and prevention of stress of the caregiver. These patients could be treated and followed by telenursing, which shows that it is a measure that meets the continuity of care, because of social isolation during the COVID-19 pandemic. Telenursing associated with in-person care by the SAD's multidisciplinary team is recommended, as well as the adoption of a nursing instrument containing diagnoses and interventions aimed at preventing the frailty syndrome, the risk of contamination, and caregiver role strain.

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