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The light of Florence Nightingale in the care for COVID-19 patients in primary health care

La luz de Florence Nightingale en el cuidado de los pacientes COVID-19 en atención primaria A luz de Florence Nightingale no cuidado aos pacientes com COVID-19 na atenção primária

Maria de las Mercedes de Dios-Aguado^a (1)

Sagrario Gómez-Cantarino 6 (D)

Paulo Joaquim Pina Queirós^c

Maria Angélica de Almeida Peres do los

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ABSTRACT

Objective: To analyze the contributions of Florence Nightingale's care model in the COVID-19 pandemic.

Method: Reflection that addresses her theoretical model and its validity in this pandemic, using interpretative research methods and limiting nursing care to primary care.

Results: Some pandemics that have caused great impact in humanity are reviewed throughout history; the evolution of nursing care in relation to pandemics is studied; the genesis of community nursing is considered, and Nightingale's care model is reviewed in COVID-19.

Conclusions: Florence Nightingale's thinking withstands the passage of time and, today, as the COVID-19 pandemic rages across the planet, her concept of holistic care and her idea of the art of nursing take on special significance by considering the context involving patients, families and communities

Keywords: Public health. History of nursing. Nursing. Pandemics. Coronavirus infections.

RESILMEN

Objetivo: Analizar el modelo de cuidado de Florence Nightingale en la pandemia COVID- 19.

Método: Reflexión que aborda su modelo teórico y vigencia en dicha pandemia, utilizado los usos interpretativos propios de la investigación y circunscribiendo los cuidados de enfermería a la atención primaria.

Resultados: Se revisan a lo largo de la historia, algunas pandemias que causaron gran impacto en la humanidad; se estudia la evolución de los cuidados de enfermería con relación a las pandemias, se considera la génesis de la enfermería comunitaria y se repasa el modelo de cuidado Nightingale en la COVID-19.

Conclusiones: El pensamiento de Florence Nightingale se resiste al paso del tiempo actualmente, a medida que la pandemia de COVID-19 hace estragos en todo el planeta, su concepto de atención holística y su idea del arte de la enfermería adquieren un significado especial al considerar el contexto que involucra a los pacientes, las familias y las comunidades.

Palabras clave: Salud pública. Historia de la enfermería. Enfermería. Pandemias. Infecciones por Coronavirus.

RESUM(

Objetivo: Analisar o modelo de atendimento de Florence Nightingale na pandemia da COVID-19.

Método: Reflexão sobre o modelo teórico de Nightingale e sua validade nesta pandemia, usando os usos interpretativos da pesquisa e limitando a assistência de enfermagem à atenção primária.

Resultados: Algumas pandemias que causaram grande impacto na humanidade são revistas ao longo da história; a evolução da assistência de enfermagem em relação às pandemias é estudada, a gênese da enfermagem comunitária é considerada e o modelo de assistência de Nightingale é revisto na COVID-19.

Conclusões: O pensamento de Florence Nightingale resiste ao passar do tempo e, hoje, quando a pandemia COVID-19 assola o planeta, seu conceito de cuidado holístico e sua ideia de arte da enfermagem ganham um significado especial por considerar o contexto que envolve pacientes, famílias e comunidades

Palavras-chave: Saúde pública. História da enfermagem. Pandemias. Enfermagem. Infecções por Coronavirus.

^a Servicio de Salud de Castilla-La Mancha (SESCAM), Centro Salud Yepes. Yepes, España.

b Universidad de Castilla-La Mancha (UCLM), Facultad de Fisioterapia y Enfermería, Toledo, España.

c Escola Superior de Enfermagem de Coimbra (ESEnfC). Coimbra, Portugal.

d Universidade Federal do Rio de Janeiro (UFRJ), Escola de Enfermagem Anna Nery, Departamento de Enfermagem Fundamental. Rio de Janeiro, Rio de Janeiro, Brasil

■ INTRODUCTION

Since the dawn of time, human beings have been able to survive and evolve as a species, but when an individual or social group breaks their biopsychosocial balance, they require help to continue their lives. Throughout history, aid in health has been provided by people from the same culture, through observation and experience, trasmitting knowledge from generation to generation. Therefore, nursing care has adapted to each historical period, due to the fact that the perception of the binomial health-disease has been different for each culture⁽¹⁾.

Caring and being cared for is innate to human condition; however, care can be explored from a personal, psychological, social, and spiritual perspective, and can, in turn, be analyzed from a disciplinary point of view. Care is the ontological reason of nursing, it is the sign that marks its identity as opposed to other professions from the health field⁽²⁾. However, the nursing art of caring, advocated by Florence Nightingale (1820-1910) implies in a conscious act. It means to act with the intention of caring to the person with no discrimination of belief, social condition, or culture, to recognize all processes of change in the person being cared for, to accompany them in their transitions by actively listening, showing humility, empathy, and care for the person⁽³⁾.

The thought of Florence Nightingale coincides with a holistic care for health, in which health is multidimensional and care is both individual and social. Holistic care can be recognized both in education and health care as a more integral care, a care that, therefore, is more significant to human beings⁽⁴⁾. Reflecting on the theories and concepts displayed by holism contributes to rethink health care historically, following the example of a pandemic.

Currently, the world is witnessing the spread of the SARS-CoV-2 virus, which causes the COVID-19, a disease which has brought unbalance to the planet and led to the collapse of health systems. Care for people, families and collectives has been indispensable and essential since the World Health Organization (WHO) declared, in March 11, 2020, that this disease was a pandemic⁽⁵⁾.

The guiding question of this study is: is the model of care of Florence Nightingale present in the care of COVID-19? The main objective of this investigation is to analyze the model of care of Florence Nightingale in the COVID-19 pandemic.

METHOD

A selection was made to clarify the objective of the study, from the perspective of primary health care nursing,

using the interpretation techniques proper to theoretical reflection and circumscribing the pandemic as an important situation of our time, which emphasizes primary health care. The selection was especially focused on the countries the authors come from, since the work provided by nursing professionals over the world is impossible to evaluate, as it may be conditioned by political, social, and cultural factors, and may follow customs and habits unknown to the investigators, in the case of other cultures or health systems.

To assess the nursing process for COVID-19, the reference used was Florence Nightingale's model of care. Regarding the technical documentation for the management of COVID-19 patients in primary care, the study used the documents validated by the health authorities from Spain, Portugal, and Brazil. This is due to the avalanche of information generated by COVID-19, which, on many occasions, has not been verified, leading to mistakes.

RESULTS

History of some pandemics prior to COVID-19 and their impact on humanity

Since the dawn of humanity, infectious diseases have been present in the lives of people. Its first signs are located in China, in the archaeological sites of "Hamin Mangha" and Miaozigou, where a massive number of people were found buried. This leads to believe that, in 5000 AC, There was an epidemic⁽⁶⁾. The first references to it are in the Ebers Papyrus, dated 2000 AC. This document mentions pestilent fevers, possibly malaria⁽⁷⁾. During the Roman empire, the Athens epidemic from 430 AC stood out, as did the Antonine Plague, of 165-180 DC, and the Plague of Justinian from 541 to 542 DC, an infection which is believed to have led to the fall of the Byzantine Empire⁽⁶⁻⁷⁾.

The Black Plague, in turn, eliminated more than half of the European population, due to its successive outbreaks⁽⁷⁾, especially the ones from 1346-1353; 1665-1666, the Great Plague of London; 1720-1723, the Great Plague of Marseille; and 1770-1772, the Russian Plague. The infection was caused by the bacillus Yersina Pestis, present in mice and fleas. It was called the black plague because the infected had a vile smell and dark spots in their skin⁽⁶⁾.

It is also worthwhile mentioning smallpox, which originated in Asia 2500 years ago, and expanded to the Middle East through commercial routes and reached Europe during the Crusades, after which it was disseminated to Oceania, Africa, and America by the explorers of these new worlds. This infection affected the population as a whole, with no

distinction of social classes, and led to the death of nearly 60 million of people⁽⁷⁾.

The flu virus, from 1500 DC on, led to nearly 30 pandemics, the most lethal of which took place from 1918 to 1920, as it infected one third of the world's population, and was especially virulent for adults and young people. This may be the pandemic that increased the knowledge of Florence Nightingale the most, although her concepts had not been disseminated in many countries yet, especially considering Latin America. The health context was still incipient, and it was not conducive to measures to prevent contagion.

Currently, in spite of the different sanitary context, the flu is still responsible for a seasonal epidemic which every year afflicts older and more frail people, leading to a high worldwide mortality. However, no case has affected the lives of people as in the pandemic in 1918, which led to the death of 20 to 40 million people, which could be due to the First World War⁽⁸⁾. Figure 1 shows, in a humorous way, the protective measures used to protect from the 1918 Spanish flu.

The Acquired Immunodeficiency Syndrome (AIDS) caused horror at the end of the 20th century, and since 1980, when the first case was identified, it has taken 35 million human lives. The AIDS, caused by the Human Immunodeficiency Virus (HIV), is believed to be the mutation of a virus that affected chimpanzees, which transferred to humans around 1920. Currently, the pharmacological treatment stabilizes the HIV, and people with AIDS can have a full life, and even cures have taken place, as demonstrated in the beginning of 2020⁽⁶⁾.

Since the early 21st century, the pandemics caused by acute respiratory syndromes associated to coronaviruses have included, among others, the severe acute respiratory syndrome (SARS), whose virus was identified in 2003⁽⁹⁾; and the Middle East Respiratory Syndrome (MERS), identified in 2012, of which there were 2494 cases confirmed by the WHO up to the end of Novemer 2019⁽⁹⁾. However, today humanity faces the threat of SARS-CoV-2. The first time this virus was described was in December 2019. It causes COVID-19, a disease that can provoke the following symptoms: low fever, pneumonia, diarrhea, anosmia, ageusia, respiratory arrest, and, often, deaths by multiple organ failure.

Currently, the pathogen is present in the entire world, overtaking countries and causing chaos in all health systems around the globe⁽⁵⁾, with an unprecedented political and financial impact. Today, the virus is believed to spread through the air, in respiratory droplets, through fomites or contaminated surfaces (elevator buttons, light switches, bath faucets, etc.), and it could be insulated in toilets and sinks, which makes it possible to think that the fecal route may be a possible path of transmission⁽⁵⁾. On March 11, 2020, the WHO declared this infection to be a pandemic.



Profilaxis contra la grippe



Figure 1 – Prophylaxis against the flu Source: Caras Y Caretas, ano XXI, N. 1048. Buenos Aires, November 2nd, 1928. Available from: http://hemerote-cadigital.bne.es/issue.vm?id=0004561948/

Evolution of the nursing care in regard to pandemics

Nursing, as a science, dates back to the origin of the first civilizations. The model of care, then, was circumscribed within the family, and due to that, women had a relevant role, considering that diseases were avoided through basic hygiene, eating, and proper clothing⁽⁷⁾. The binomial health-disease was interpreted as a prize or a punishment, in such a way that, when a plague or pest took place, the care was applied by shamans, wizards, or healers⁽²⁾.

The Greek civilization led to a transition from magic into science within the binomial health-disease⁽²⁾. Hypocrites (460-385 AC), in his work Epidemics (5th century AC), created the term epidemic, which meant a visit or arrival at a place, from the data collected in a travel of his to a settlement or a patient⁽⁷⁾. During the expansion of Christianism, the care provided to the diseased had a remarkable humane character, vocational and religious, as it was provided by military,

religious, and secular orders⁽¹⁾. Coupled with the mystic of the the time (Jewish exodus, lent, etc.) the concept of quarantine was created, a time that was meant to be straight or for overcoming something; therefore, to defeat any infectious disease, people and animals had to overcome a period of isolation of forty days⁽⁷⁾.

The vaccine against smallpox was discovered in 1796 by Edward Jenner (1749-1843). It was a scientific revolution, and, in 1803, King Carlos IV enacted a Royal Order in October 14, authorizing the Royal Philantropic Expedition of the Vaccine⁽¹⁰⁾, which managed to take the vaccine to all overseas Spanish territories. The expedition was led by the physician Francisco de Balmis y Berenguer. It lasted 10 years and one of its members was Isabel Zendal Gómez. The voyage was such a feat that the WHO considers it to be the first vaccination campaign in the world, seeing Isabel Zendal as the first public nurse in an international mission⁽¹⁰⁾.

The genesis of community nursing

At the start of the 19th century, the image of nurses in Europe was associated to that of illiterate women, of ill repute and drunk with gin⁽¹¹⁾. This stereotype emerged as a consequence of the extenuating work they did in the form of caring for the diseased, because the nurse had to manipulate the private parts of people, to manage their body fluids, and to adapt the home of the disease to their needs, with little knowledge⁽¹¹⁾.

However, the Deaconesses of Kaiserswerth, an institution created by Theodor Fliedner (1800-1864), in Germany, carried out a revolution in the training to care for the diseased. The center instituted an educational program that lasted for three years, where the students received a solid training and education, so that, at work, they provided the diseased with quality care, which motivated the appreciation of people at the time. Two examples of nurses who were trained in this institution were Mary Robinson and Florence Nightingale⁽¹¹⁾.

In 1859, in England, the institution Training School and Home for Nurses was founded, a place that promoted the function of district nurse. The institution was funded by the philantropist William Rathbone and directed by Mary Robinson⁽¹¹⁾, while Florence Nightingale was reponsible for training the nurses. Using her manual, "Notes on Hospitals" (1858), she introduced the principles of hygiene into the institution, and through "Notes on Nursing: What it is and

what it is not" (1859), she promoted the concept of holistic care, which makes it possible to aid the poorer in a dignified way, in conditions of inequality and with no distinction of belief or social class. As a result, she prepared the nurses to be capable of something more than administering medicine and poultices, teaching them to find out what the needs of people were⁽¹²⁾. Figure 2 shows the nursing care provided by Florence Nightingale to her patients.

In Spain, this type of care started to be implemented in 1915, when the Royal Order from May 7th was enacted. It stated that the Ministry of Public Instruction and Fine Arts would create the title of Nursing and the petition for the Siervas de María (the Servants of Mary)⁽¹³⁾.

At this time, community health started to gain relevance, and starting in 1920, the Rockefeller Foundation financed multiple projects in Spain, Portugal, and Brazil, forming many health professionals from these countries in American universities⁽¹³⁾. Simultaneously, in Brazil, this foundation contributed to disseminate the ideas of Florence Nightingale, and so, in 1922, it funded the Mission of Nurses from North America, and entity that implanted the Service of Public Health Nursing, which is responsible for consolidating health reformations and to create a school of nursing⁽¹⁴⁾. In Spain, the foundation found a very productive partnership due to Gustavo Pittaluga, renowned microbiologist and director, from 1930 to 1934, of the Spanish National Public Health School, institution where community health nurses were highly valued⁽¹³⁾.

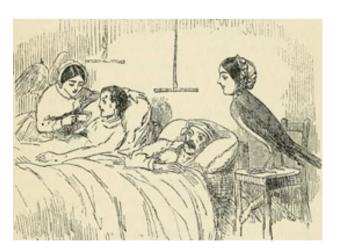


Figure 2 – The live of Florence Nightingale, by Sarah A. Southall Tooley

Source: Tooley SAS. Londres: SH Bousfield & Co., 1905. Available from: https://vauxhallhistory.org/florence--nightingale-times-obituary/

The model of care of Florence Nightingale during COVID-19

The WHO, in the International Conference on Primary Health Care, celebrated in 1978 in the city of Alma-Ata (Kazakhstan), defined the concept of primary care. However, this concept has gained nuances with successive summits, and sometimes it is associated to the health care provided in an ambulatory. At other moments, it is described as a set of priority interventions, offered to the vulnerable population. In some occasions, it is considered to be the essential sanitary component for human development⁽¹³⁾.

The model of nursing described by Nightingale⁽¹²⁾ gives importance to the meaning of primary health care by correlating it to the concepts described earlier, due to the fact that its main axes are the person, the surroundings, the health, and the care. Since the perspective of nursing is the relationship that exists between the concepts and the values, in such a way that its mission is to put in practice the scientific knowledge and the abilities acquired for the provision of quality care to the diseased. Therefore, to be able to provide this type of care in face of the COVID-19 pandemic, it is also indispensable to take into account the directives established by the health authorities of Spain, Portugal, and Brazil, with regard to the clinical management of the COVID-19 patient, both at home and in the health centers⁽¹⁵⁾.

The person is the center of care⁽¹²⁾, and their opinion must be taken into consideration. Therefore, during the observation of the patient with COVID-19 symptoms, the nursing personnel assesses verbal and non-verbal communication to find sings of despair, fear and dread. These emotional states are conducive to diminished respiratory capabilities, discomfort, and even a feeling of suffocation, all of which require the person to be urgently transferred to a hospital. However, when this person is treated with empathy, their opinion is considered, they feel accompanied and their beliefs and decisions are respected. As a result, they feel cared for and protected. Therefore, the person starts to relax, and even though their bodies is affected by the environment, due to the contamination by the SARS-CoV-2 virus, the physical, emotional, intellectual, and spiritual components are valued at this moment. The person trusts the primary care professionals, accepts treatment and care, follows the health advice prescribed, and stays in their community, city, or house with no need to bring the health system into a collapse.

Regarding the environment, Nightingale⁽¹²⁾ considered that overcrowding and malnutrition led to continued diseases. Therefore, to reestablish the health of the COVID patient, it is necessary to consider biological, psychic, and social aspects of each person, as well as the influence that

emotions have on them. Recognizing these needs demands that some patients are given the right to free transit during the isolation period, a document to be signed by the sanitary personnel of the health center (including nurses). These patients can be those who suffer from emotional liability, significant alteration in cardiovascular risk factors, pregnant women, children, people with disabilities, mental pathologies, etc. The prescriptions should include recommendations about how and when these people should leave their houses, as long as they are firmly committed to maintain all safety measures currently enforced. The nursing prescription of care during isolation has facilitated and contributed for people to continue closed in their houses even in cases when they live in extremely small spaces. Therefore, the nursing care contribute for the health care to people with chronic diseases to take place simultaneously to the care of COVID-19 persons, since it reduces the presence of patients in the health services.

In turn, the diet for each person is adapted to avoid deficiencies or excessive ingestion. On the other hand, in some occasions, social services deal with families in situation of vulnerability or who are suspected to lack resources to carry out personal hygiene, clean their houses, and have a good enough diet during confinement. Nightingale emphasized not only hygiene and diet, but also the access to natural light and fresh air. Therefore, everyone should be recommended to ventilate their houses daily. In any place where an isolated person is, the window should remain open day and night, but, at the same time, it is essential for them to have daily baths and for their clothes to be cleaned⁽¹⁵⁾.

The concept of health⁽¹²⁾, defined by the author as the sensation of feeling well, as well as the capacity of using the faculties of the person to their maximum, is evaluated by the nursing personnel through telematics and teleconsultations. Daily, using the new technologies, the patients with COVID-19 or not should receive phone calls, with special attention to fragile or vulnerable patients. The nursing personnel, through virtual or telephone interviews, values and evaluates the person, examines and recognize warning signs, such as fever, diarrhea, anosmia, ageusia, fatigue, cough, respiratory capacity, emotional stability, nutritional habits, sleep rhythm, and follows up the patient to evaluate their degree of improvement or deterioration. This could motivate a referral for the physician or a recommendation for the patient to come to the health center for an in-person evaluation.

Considering this, the nursing team is essential in the primary health care team, since the people who, for years, received care from community nurses, who carried out the profession for which they had a calling, with reliability and honesty, manage to provide a safe environment

for the patient. In this precious instant, the person trusts in the nurse and manages to reestablish their health in their community, city, or residence, with no need to block hospital emergencies ⁽¹⁵⁾.

Figure 3 shows the recognition of the artist Bansky to the work of nurses during the COVID-19 pandemic.



Figure 3 – Game Changer. Work by Bansky Source: Casbas Maria. The new work by Bansky is a homage to the sanitary professionals Condé Nast Traveler. Urban Trips, 7/5/2020, Available from: https://www.traveler.es/viajes-urbanos/articulos/nueva-obra-banksy-enfermera-hospital-southampton-homenaje-heroes-profesionales-sanitarios-covid-19/18031

Regarding the axis of care⁽¹²⁾, the nursing personnel has shown, during the pandemic, that holistic care can detect the real health problems of people, and therefore, during COVID-19, using the model developed by Florence Nightingale, persons are cared for in all their dimensions, and it is possible to reach towards the most vulnerable and care for the most fragile person. Consequently, the patients with light symptoms are recommended to stay isolated in their homes for 14 days. This helps recovery and diminishes the risk of infection in the members of the family unit. Therefore, health professionals, especially nursing professionals, must evaluate the circumstances that can interfere in their confinement, adopting measures to facilitate it. They must also insist for the daily cleaning of baths or in services for cleaning, and remember the steps for good hand hygiene. Mentioning that the diet must be introduced in home, and paying special attention to the removal of fomites, in addition to taking into consideration all respiratory hygiene recommendation and limits to movement prescribed during isolation. All these tasks must be reevaluated periodically throughout isolation, as a strategy to keep the person connected to the health services, so they feel cared for and in safe surroundings⁽¹⁶⁾.

The effects of the COVID-19 pandemic have forced primary care nurses to pay closer attention to mental health, due to the increase in cases of psychic suffering in the population. Due to the limitations of the territory, the holistic care becomes more important in the different dimensions in which the nurse works with each patient individually, in an attempt to understand their biopsychosocial needs⁽¹⁷⁾.

During isolation, in many occasions, the person only receives support from the nurse, who, through phone calls, through the voice and the active listening, evaluates and notices the warning signs in the diseased, but also gives support and cares for the patient virtually by prescribing health advice, just like Florence Nightingale did in her nights awake in Scurati, when she probed the patients, discovered their needs, and understood their despair through active listening, managing to comfort people even when their thoughts, culture, or religion were not the same as hers⁽¹⁸⁾.

CONCLUSION

The thought of Florence Nightingale, just like good paintings, never gets old. The opposite: it resists the passage of time and even sets new trands. Therefore, today, as the COVID-19 pandemic ravages the world, her concept of holistic care and her ideas of an art of nursing acquire special meaning, in such a way that **the lady of the lamp illuminates the desolate rooms of the health centers and guides nursing professionals in the care of people**, both in their houses and in the centers for primary care. Furthermore, the nurse manages to put in practice the art of nursing as advocated by Nightingale, including the mitigation of the suffering caused by COVID-19 in the patient.

Today, in any corner of our countries, nursing has struggled against anguish, fear, and even the terror which COVID-19 causes in the patient, the same that the soldiers in Crimea suffered, as they felt the approach of death.

Even when the pandemic extends through the world, it is indispensable to remember the warning made by Nightingale: do not think that you do anything useful as a nurse until you leave the hospital and take care of the diseased in their homes. It is true and correct, since in the solitude of home, between memories and absences, and with the virus approaching people and taking their loved ones away without the possibility of saying goodbye to the ones they love — since SARS-CoV-2 took them from the family's bosom with no farewell —, in these circumstances, the nursing primary care personnel shows

their value, by mitigating the ravaging pain through the care they offered to those affected and starting to treat the pain in the bosom of a broken family, in the house, in the warmth of a home that will not be the same, and in front of an empty seat.

The Scutari hospital marked what nursing would become, since, starting with her stay there, Nightingale started to create her own work with the firm desire to fight suffering and inequality, the mystique of her spirituality, which accompanied her during her exercise of nursing, until her last days, and she left to us for eternity. Finally, the year 2020, considered to be the year of nurses and midwives, which thus evokes the works of Nightingale, must be a point of inflection, to reclaim in an international level, the role of the nurse, regardless of the physician.

Furthermore, this year must honor the work carried out by primary health care nurses, since they have attended people in any setting, house, sociosanitary residence, clinic, in rural and/or urban offices, caring for people in any stages of their lives, all that while they are exhausted by the stress the went through by putting in danger their own lives and those closest to them.

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Dios-Aguado MM, Gómez-Cantarino S, Queirós PJP, Queirós MAA

■ Authorship contribution:

Concept: María de las Mercedes de Dios-Aguado. Methodology: María de las Mercedes de Dios-Aguado.

Supervision: Sagrario Gómez-Cantarino.

Visualization: Maria Angélica de Almeida Peres and

Paulo Joaquim Pina Queirós.

Writing - original draft: María de las Mercedes de Dios-Aguado, Sagrario Gómez-Cantarino and Paulo Joaquim Pina Queirós.

Writing: revision and editing: Maria Angélica de Almeida Peres, María de las Mercedes de Dios-Aquado.

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■ Corresponding author:

Maria Angélica de Almeida Peres E-mail: angelica.ufrj@uol.com.br

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