

# Self-care deficit among older men in the COVID-19 pandemic: implications for nursing

*Déficit do autocuidado entre homens idosos no curso da pandemia de COVID-19: implicações à enfermagem*

*Déficit de autocuidado entre hombres mayores en el transcurso de la pandemia de COVID-19: implicaciones para la enfermería*

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## ABSTRACT

**Objectives:** to analyze self-care deficit among older men in the COVID-19 pandemic in Brazil and to discuss the implications for nursing practice. **Methods:** web survey, multicentric, qualitative. A total of 120 older men participated, applying a form from April to June 2020 and April to August 2021. Reflective Thematic Analysis, interpreted by Orem's Self-Care Deficit Theory, was used. **Results:** temporally, the self-care of older men was manifested in the self-care requirements - affective bonds, self-care for development - meditation and self-care with health deviations - remote consultations. Fully, partially compensatory, educational/support systems mobilized self-care. **Final Considerations:** as care managers, nurses can strengthen the support network for older men by activating professionals from the multidisciplinary team, family members, caregivers and the community to promote self-care and correct health deviations in times of crisis.

**Descriptors:** Pandemic; Self Care; Nursing Care; Men's Health; Health of the Elderly.

## RESUMO

**Objetivos:** analisar o déficit do autocuidado entre homens idosos no curso da pandemia de COVID-19 no Brasil e discutir as implicações para a prática em enfermagem. **Métodos:** web survey, multicêntrica, qualitativa. Participaram 120 homens idosos, sob aplicação de formulário de abril a junho de 2020 e abril a agosto de 2021. Empregou-se a Análise Temática Reflexiva, interpretada pela Teoria do Déficit do Autocuidado de Orem. **Resultados:** temporalmente, o autocuidado de homens idosos se manifestou nos requisitos de autocuidado - vínculos afetivos, autocuidado para o desenvolvimento - meditação e autocuidado com desvios de saúde - consultas remotas. Déficits no autocuidado emergiram dos danos biopsicossociais. Os sistemas totalmente, parcialmente compensatórios, educativo/de apoio mobilizaram o autocuidado. **Considerações Finais:** como gestores do cuidado, enfermeiros podem fortalecer a rede de apoio aos homens idosos acionando profissionais da equipe multiprofissional, familiares, cuidadores e comunidade para promover autocuidado e corrigir desvios de saúde em momentos de crise.

**Descritores:** Pandemia; Autocuidado; Cuidados de Enfermagem; Saúde do Homem; Saúde do Idoso.

## RESUMEN

**Objetivos:** analizar el déficit de autocuidado entre ancianos en el transcurso de la pandemia de COVID-19 en Brasil y discutir las implicaciones para la práctica de enfermería. **Métodos:** web survey, multicéntrica, cualitativa. Participaron un total de 120 ancianos, aplicando un formulario de abril a junio de 2020 y de abril a agosto de 2021. Se utilizó el Análisis Temático Reflexivo, interpretado por la Teoría del Déficit de Autocuidado de Orem. **Resultados:** temporalmente, el autocuidado de los ancianos se manifestó en los requerimientos de autocuidado - vínculos afectivos, autocuidado para el desarrollo - meditación y autocuidado con desviaciones de salud - consultas a distancia. Los sistemas educativos/de apoyo total o parcialmente compensatorios movilizaron el autocuidado. **Consideraciones Finales:** como gestores del cuidado, los enfermeros pueden fortalecer la red de apoyo al anciano activando profesionales del equipo multidisciplinario, familiares, cuidadores y comunidad para promover el autocuidado y corregir las desviaciones de salud en tiempos de crisis.

**Descritores:** Pandemia; Autocuidado; Atención de Enfermería; Salud del Hombre; Salud del Anciano.

## INTRODUCTION

The COVID-19 pandemic and its challenges, especially in low- and middle-income countries, exposed not only the precariousness of health systems in Latin America, but also inequalities in social determination in the health-disease-care process. They also revealed social, economic, political, cultural, gender, racial, ethnic and different groups vulnerabilities, especially of older adults<sup>(1-2)</sup>.

The overall mortality of older adults between 60 and 69 years with COVID-19 is 3.6%, higher when compared to the general population (2.8%)<sup>(3)</sup>, with rates intensifying among those over 70 years of age and males<sup>(4)</sup>. With regard to deaths due to COVID-19, treatment that older adults have received during the pandemic reflects the discriminatory agism that limits the allocation of resources and access to health services<sup>(5)</sup>, revealing the need to organize the public health care network to meet the demands presented by this population segment<sup>(6)</sup>.

The fact that older men are more affected by the coronavirus is already mentioned in the world literature<sup>(7-8)</sup>, which points out a restrictive attention to social markers of sex and gender, such as the observation of a higher incidence in hospitalizations, unfavorable outcomes and over-mortality permeated by genetic, behavioral factors of hegemonic masculinity and threatening lifestyle, which indicate the emergence of attention to health promotion, restoration and rehabilitation.

The social distance imposed globally in early 2020<sup>(9)</sup> for COVID-19 management and prevention resulted in loneliness and interruption of the transit of older adults in public spheres, disruption in satisfaction of needs, such as gregarious, in addition to affecting sociability, mobility and access to services that supported them in the face of health deviations, expanding demands for care and self-care. This situation motivated the research question formation: what are the demands of self-care added to the lives of older men in two moments of the pandemic: in their first year, after social isolation, and in the second year, with the advancement of vaccination?

The experience of older men in health care requires a direction based on Orem's Self-Care Deficit Theory<sup>(7,10-12)</sup>, which is structured in guiding subsystems for a systematic nursing practice, such as the Self-Care Theory, the Nursing Systems Theory and the Self-Care Deficit Theory, the latter encompassing the deficit of dependent self-care. The Theory's proposition contributes, with models that compose it, in defining a Therapeutic Self-Care Demand (TSCD), which is reflected in the actions of life, health and well-being that is established among those involved (nurses and older men)<sup>(7,10-12)</sup>.

In the context of the pandemic, situations such as isolation, fake news on social networks, fear and difficult access to the health system, among others, led to the precariousness of male self-care, causing concerning health deviations<sup>(7,10-12)</sup> for the global health agenda during and after the pandemic<sup>(13)</sup>. Thus, this study is justified by its scientific and social relevance.

In addition to this, the problem presented demands the production of professional nursing care, since the COVID-19 pandemic boosted the installation of self-care subsystems and self-care deficit in joint activation of partial and totally compensatory systems and the education/support system. Therefore, coherent, accurate and subsidized interventions on a theoretical basis will be necessary to meet older men's needs<sup>(7,10-11)</sup>.

## OBJECTIVES

To analyze self-care deficit of older men in the COVID-19 pandemic in Brazil and discuss the implications for nursing practice.

## METHODS

### Ethical aspects

This research was approved by the Research Ethics Committee of the *Universidade Federal da Bahia* (UFBA). As it is a Web Survey, all ethical protocols were followed according to the recommendations of Circular Letter 2<sup>(14)</sup>, in which the participants were identified by means of M codes, of man, followed by reference number, such as 1, 2 (M1, M2...).

### Theoretical-methodological framework

Dorothea Elizabeth Orem's Self-Care Deficit Theory (SFDT) was used to contextualize the object. It presents and explains the main reasons that lead people to be helped by nursing professionals, according to their level of dependence on self-care<sup>(10-11)</sup>. It is composed of three sequential theories, of which two were used in this study: 1) Self-Care Theory (SCT) and 2) SFDT<sup>(7-10)</sup>.

Its use in this study is justified by the discussion that the theory makes of the participation of nurses in planning and intervention based on essential priority requirements to human life according to Orem, such as air, food, activity, rest, loneliness, social interaction, risk prevention and promotion of normality, considered as necessary for the exercise of self-care<sup>(10-12)</sup>.

### Study design and setting

This is a guided qualitative study and methodologically oriented by the Consolidated Criteria for Reporting Qualitative Research (COREQ), carried out in a virtual environment – Web Survey<sup>(14)</sup>.

### Data source

From a national multicenter survey on health impacts of COVID-19 on men in Brazil, which used social networks, such as WhatsApp®, Instagram®, Facebook®, Grindr® and Scruff®, to attract participants through an invitation. In this cut, the data collected from the last two social networks were used, as they have a high concentration of male users. The men who were willing to participate publicly were sent SMS and e-mail detailing the survey. From there, sample groups were organized, one from each region of Brazil. Subsequently, individual invitations were sent to each of these groups, using the snowball<sup>(15)</sup> technique to attract new participants.

The matrix research investigated adult and older men at two times of the pandemic, and in the present study, men aged 60 years or more<sup>(16)</sup> were selected. The first data collection occurred between April and June 2020 (Group 01-2020), and the second, between April and August 2021 (Group 02-2021). Older adults who experienced the COVID-19 pandemic in Brazil were included. Older adults living in Brazil on international travel, immigration and refuge during the pandemic were excluded. The sample was intentional<sup>(17)</sup>, composed of 120 people, 94 from group 1 and 26 from group 2.

## Data collection and organization

Data collection took place through an electronic form, self-applied and semi-structured by Google Forms<sup>®</sup>, free version, chosen for having wide dissemination in Brazil, being easily accessible and operationalized, and for incorporating encryption. The instrument has a mean filling time of 20 to 30 minutes, consisting of closed-ended questions about sociodemographic, occupational/labor and health characteristics; and open-ended questions about the repercussions/impacts of the COVID-19 pandemic on men's health: *one year after the pandemic in Brazil, did you experience anything important (that you want to highlight) in relation to your health? Describe what happened. How has the pandemic impacted your health care? Describe what happened.*

Furthermore, participants obtained information about the research and its team through the Informed Consent Form (ICF) in the imagination modality, composed of eight undergraduate and graduate student researchers, master's degree and PhD degree holders with experience in the area of investigation and acting in teaching/research.

Data were organized in their own folders in a Word<sup>®</sup> file. Soon after, they were transferred to the NVIVO12 software and submitted to coding.

## Data analysis

Reflective Thematic Analysis was used, which allows the identification, immersion with deep engagement, analysis, interpretation and relationship of patterns/themes based on qualitative data that attest to fluidity and flexibility in its coding process<sup>(18)</sup>. This followed the six phases: familiarization with data through reading and re-reading the answers to the instrument, highlighting and pointing out initial ideas; systematic coding of the relevant characteristics of data across the set, when recurring patterns of response content were observed; grouping the codes into potential themes, which were then analyzed, considering the relationships between them; a rereading and review of all themes was carried out, and it was verified how they were related to the coded extracts; thematic categories and their respective subcategories were defined and named; the analytical writing report was prepared, covering the final analysis of extracts, as well as the interconnection of the most significant extracts between themes<sup>(19)</sup>.

For the interpretation/theoretical framework of the findings, Orem's SFDT<sup>(7,10-12)</sup>, was adopted in a perspective of elucidating self-care dimensions experienced by older men in the context of the COVID-19 pandemic and pointing out the implications for nursing practice.

## RESULTS

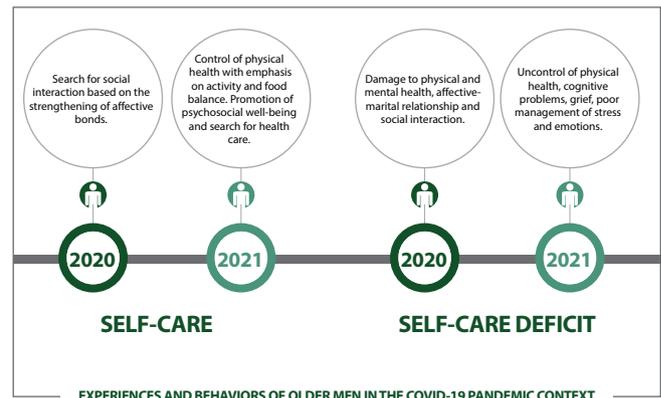
The results are structured in participant characterization and in the presentation of empirical data, based on the theoretical framework.

### Participant characterization

The 120 participants were mostly heterosexual, cisgender, self-reported white, followed by brown, aged between 60 and 88 years, married, with higher education and income of three to five

minimum wages – retirees and/or pensioners. Most claimed to be resident in the northeast of Brazil, followed by the southeast, living at home, in the company of consorts and making use of health services linked to the Unified Health System (SUS - *Sistema Único de Saúde*) and private health insurance in a combined way. Of these, 14 men reported living alone and/or in the company of pets.

Empirical data related to self-care and self-care deficit are structured in a comparative-temporal way, in two moments, as illustrated in Figure 1.



**Figure 1** - Comparative-temporal line of experiences and behaviors of older men in the face of self-care and self-care deficit in the pandemic context of COVID-19

### Thematic category 1 – Self-care and therapeutic demand for self-care

This category gave rise to three thematic nuclei: *self-care requirements*, *self-care requirements for development* and *self-care requirements with health deviation*, terms used in Orem's theoretical systems, whose representative statements are presented in Chart 1.

### Thematic category 2 – Self-care deficit

It was subdivided into three thematic nuclei, which received titles also used by Orem, called *totally compensatory system*, *partially compensatory system* and *educational/support system*.

The *totally compensatory system* thematic core showed feelings of suffering and impacts that generate deficits in self-care. From the speeches collected in 2020, four subthemes were found: *physical health damage*, *mental health damage*, *affective-marital relationship damage*, and *social interaction damage*, which were amplified in 2021, from the sub-themes non-physical health management, cognitive problems, grief, stress and emotion management.

As for *partially compensatory system*, in the speeches, regarding the year 2020, three sub-themes stood out: *sanitary control for prevention and protection against COVID-19*, *health management*, and *psychosocial and spiritual well-being promotion*. In 2021, older men have been shown to correct the 2020 deficit in self-care with the themes: *physical health restoration*, *management of mental health disorders* and *promoting harmony and functionality in family and social processes*, reported in their speeches, demonstrating a progressive character of the previous year of the beginning of the pandemic and evolutionist around the elements that constituted the deficit in 2020.

**Chart 1** - Thematic category 1 on self-care, therapeutic self-care demand and its requirements

<b>Thematic category 1 – Self-care and therapeutic demand for self-care</b>
<b>Group 01-2020</b> <b>Self-care requirements:</b>
[...] <i>I tried to be closer to my family members and strengthen affective bonds.</i> (M01); [...] <i>I improved my diet, started cooking at home and sunbathing.</i> (M93); [...] <i>I am complying with quarantine, social distancing, washing and sanitizing of hands and food and the domestic environment.</i> (M99); [...] <i>I started to access content on the internet and stayed connected on social networks and participate in WhatsApp groups to be involved with friends and reduce the impact of social isolation.</i> (M100)
<b>Self-care requirements for development:</b>
[...] <i>I kept myself informed.</i> (M76); [...] <i>meditated, I paid more attention to my interior and to the interaction with the other.</i> (M90); [...] <i>I tried to start activities that would preserve my health, especially mental, such as resting my mind, keeping calm, exercising faith in God.</i> (M105); [...] <i>I learned to give more value to others.</i> (M105)
<b>Self-care requirements with health deviation:</b>
[...] <i>I started to prevent myself against COVID-19, but maintained other health care such as periodic medical consultations, carried out by phone call and video call.</i> (M112); [...] <i>I needed to maintain a health treatment, visits to services for evaluation and to the pharmacy to purchase medicines.</i> (M117); [...] <i>the pandemic prevented me from performing health care as I did before. I stopped attending the health unit and the social group that I was part of.</i> (M120); [...] <i>I had a health problem and needed to be hospitalized amid the pandemic.</i> (M121)
<b>Group 02-2021</b> <b>Self-care requirements:</b>
[...] <i>I tried to reduce the sedentary lifestyle, the consumption of sugar and carbohydrates, I consumed vitamins and minerals and healthier foods, I started a diet, and started to practice exercises, which led me to lose weight.</i> (M01); [...] <i>I have been going to the gym and doing weight training.</i> (M02; M29); [...] <i>physical activities done at home.</i> (M30); [...] <i>to walk and cycle.</i> (M39)
<b>Self-care requirements for development:</b>
[...] <i>gardening and started to take more care of pets.</i> (M04); [...] <i>reduce stress.</i> (M08); <i>good readings and more virtual cultural activities. My stance was not to ignore the reality and significance of the pandemic at any time, but also to face and fight it with proactive actions, without being subject to neurosis and fighting fake news. I maintained activities with plants and vegetation, logical and scientific readings on the subject [...] I distanced myself from neurotic and frightened people.</i> (M30)
<b>Self-care requirements with health deviation:</b>
[...] <i>I started to seek and follow medical guidelines.</i> (M01); <i>cardiology and gastroenterology and increased care.</i> (M23); [...] <i>I started to do preventive care.</i> (M50)

In *educational/support system*, in 2020, the following sub-themes of speeches were highlighted: *seeking support from the health system e approach and strengthening of family and socio-affective bonds*, considered as promoters of positive feelings and emotions for coping with the pandemic context, at its most critical moment,

spanning three subthemes of educational/support behavior in 2021: *seeking support from the health system, health management e strengthening of family and socio-affective bonds*.

Chart 2 outlines how the three thematic nuclei were constructed by the theoretical systems and their statements.

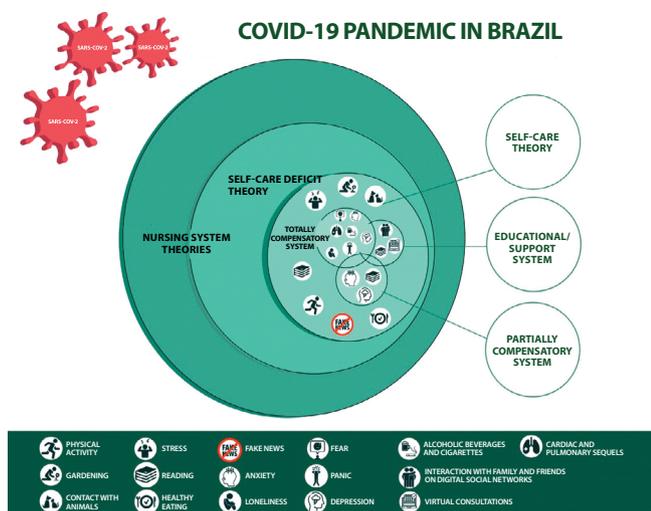
**Chart 2** - Thematic category 2 on self-care deficit and its totally compensatory, partially compensatory and educational/support systems

<b>Thematic category 2 – Self-care deficit</b>
<b>Group 01-2020</b> <b>Totally compensatory system:</b>
<b>Physical health damage:</b> [...] <i>my blood pressure got out of control after the pandemic, malaise.</i> (M09); [...] <i>health problems, especially in circulation and motor strength.</i> (M19) <b>Mental health damage:</b> [...] <i>changes in sleep and a lot of muscle tension [...] anxiety, apprehension, insecurity, restlessness and fear.</i> (M01); [...] <i>to consume alcoholic beverages and cigarettes, much more than before, which I did in a social way, and in the pandemic, I started to consume almost every day.</i> (M08) <b>Affective-marital relationship damage:</b> [...] <i>marital relationship was affected by the pandemic. We started to have more conflicts, withdrawal and changes in sexual practice.</i> (M11); [...] <i>the affective relationship with friends, who became more distant.</i> (M18) <b>Social interaction damage:</b> [...] <i>the distance from contact with the people in my social life greatly harmed my health and well-being.</i> (M13); [...] <i>I felt alone and trapped inside the house.</i> (M14); [...] <i>I was removed from work for being an older adult and for being considered a risk group for COVID-19. My relationship with my co-workers has diminished and it has made me lonely.</i> (M15); [...] <i>the impossibility of accessing the street and having public mobility, made it difficult for me to get used to the new routine.</i> (M17)

To be continued

Chart 2 (concluded)

<p><b>Thematic category 2 – Self-care deficit</b></p>
<p><b>Partially compensatory system</b></p>
<p><b>Sanitary control for prevention and protection against COVID-19:</b> [...] I quarantined, social distanced, hand washed and sanitized [...] of the domestic environment and food. (M02)  <b>Health management:</b> [...] I needed to go to the doctor, who increased the dose of my medication for high blood pressure. (M09)  <b>Psychosocial and spiritual well-being promotion:</b>          [...] I tried to reduce the stress and anxiety generated by isolation, seeking to access news on the internet, watch movies and series, television programs, listen to music, take care of domestic and work activities, in addition to having sex. (M03); [...] I tried to distract myself, communicate with people, even if virtually, through social networks. (M05); [...] I tried not to think too much about the pandemic and for that I paid more attention to my pets. I took care of plants and started listening to music. (M06); [...] to fix furniture and do physical activity. (M07); [...] I tried to get involved with the production of text and art. (M21)</p>
<p><b>Educational/support system</b></p>
<p><b>Seeking support from the health system:</b> [...] I searched for readings, accessed reliable websites such as the Ministry of Health to obtain reliable information about COVID-19. (M01); [...] I counted on the Family Health Unit support in my neighborhood to perform a quick test for COVID-19 and to maintain the health care that I already performed before the pandemic. (M03)  <b>Approach and strengthening of family and socio-affective bonds:</b> [...] family and friends were very important to overcome the first months of social isolation to control the pandemic, due to loneliness and anxiety. (M10); [...] contact with optimistic friends helped me to face the pandemic with acceptance, confidence and strength. (M16); [...] caring for my children and contacting friends and colleagues on social media helped me to face the most critical moment of the pandemic, when I had to stay indoors for most of the day. (M20)</p>
<p><b>Group 02-2021</b>  <b>Totally compensatory system:</b></p>
<p><b>Non-physical health management:</b> [...] tiredness increased. (M06); [...] I did not perform periodic examinations. (M07); [...] I detected a very serious prostate problem, I stopped ejaculating. (M10); [...] I didn't go to doctors, hospitals and I didn't do preventive exams. (M11); [...] I gained weight and reduced physical exercise [...] I had post-COVID sequel, such as decreased lung capacity, body aches and muscle weakness. (M31); [...] I did not do any exams, only two medical appointments, during all this time. (M48); [...] I neglected my appearance. I stopped shaving and cutting my hair. (M58); [...] I started to have visual fatigue. (M68); [...] my circulation problem got worse. (M80); [...] I have suffered from severe gastrointestinal disorders due to the use of Chloroquine. (M89)  <b>Cognitive problems, grief, stress management and emotion management:</b> [...] stress and rheumatic pain increased. (M08); [...] I have felt powerless. (M11); [...] I got more depressed. (M13); [...] postponed routine exams for fear of COVID-19. (M14); [...] I increased my alcohol intake. (M16); [...] I started having mental problems like fear and panic. (M19); [...] my immunity has dropped and I am shaken by the many losses of family, friends, colleagues and acquaintances. (M32); [...] I have felt constant sadness. (M38); generalized anxiety and grief over death [...] anger and irritability increased. (M41); [...] I lost my partner, a victim of COVID-19 and that made me lose the meaning of life. (M48); [...] I am having hand tremors and forgetfulness. (M60)  <b>Sociopolitical crises:</b> [...] the total absence of planning, articulation and coordination by the federal government hampered my health care in relation to the prevention and control of COVID-19. (M32); [...] I started to walk and cycle. (M39)</p>
<p><b>Partially compensatory system</b></p>
<p><b>Physical health restoration:</b> [...] I started going to a gym and doing weight training. (M02); [...] use of alcohol gel, constant water and soap and use of vitamins. (M10); [...] more medical appointments and taking more medicine. (M35); [...] I went to the cardiologist. (M41); [...] I am having cardiac sequel from COVID-19 and my insulin is increasing. As a result, I started the treatment. (M43); [...] I am having a loss of appetite and with that, I increased the care. (M49); [...] daily exercises, meditation, medical consultations whenever necessary, seeking to follow all the sanitary recommendations of health agencies. (M56)  <b>Management of mental health disorders:</b> [...] I started taking a homeopathic medicine. (M10); [...] care with improving sleep. (M18); [...] take more care of my well-being. (M24); [...] I increased care and attention to mental health. (M37); [...] I am having bouts of depression and having to take medication. (M41); [...] my mental health has deteriorated; I have moderate depressive symptoms and I am doing virtual consultations. (M47)  <b>Promoting harmony and functionality in family and social processes:</b> [...] I had the need to learn to live in relative isolation with the family [wife, son and a maid who helps us with household chores and in the education of our son, as she is a retired teacher]. (M56); [...] the social restriction caused me a period of adaptation to the new of the pandemic. (M61)</p>
<p><b>Educational/support system</b></p>
<p><b>Seeking support from the health system:</b> [...] I became more attentive to the recommended prevention measures, following the health protocols that were informed. (M03); [...] I changed hygiene habits and this change was due to the influence of the media. (M14)  <b>Health management:</b> [...] I have been practicing social distancing, medical appointments have been remote, and I have been taking food supplements more often. (M36); [...] hand hygiene, I wear a mask continuously. (M46)  <b>Strengthening of family and socio-affective bonds:</b> [...] I expanded contacts, by electronic means, with friends and relatives [...] I worried about the health of relatives, I strengthened communication and mutual support [...] I made the most of my time at home to apply in varied readings, with the purchase of books. (M56)</p>



**Figure 2** - Representative pictogram of the explanatory model of Dorothea Elizabeth Orem's Self-Care Deficit Theory, adapted to the results found in the research

Considering the comparative data obtained by the groups of older men in 2020 and 2021, it is possible to visualize some groupings within each nursing system described by Orem, through the pictogram in Figure 2.

## DISCUSSION

Required and mobilized by the requirements of self-care, self-care for development and with health deviation<sup>(11)</sup>, the data pointed to specific socio-historical markers of the COVID-19 pandemic daily life in each time frame, as well as older men's behavior in relation to self-care and self-care deficit in the context of this pandemic, based on a comparative analysis between 2020 and 2021.

The data expressed the progressive and evolutionary character of the precursor elements of the therapeutic demand for self-care. In this process, all life, health and well-being actions are summarized, from the moment the nurse understands the patient as a whole and performs the interpersonality metaparadigm imposed by Orem<sup>(10-11)</sup>, considering the health deviations that refer to care and decision-making by nursing professionals to ensure comprehensive care focused on a health problem (COVID-19), usually already detected and/or diagnosed according to the theoretical framework<sup>(11)</sup>.

In 2020, the beginning of the pandemic in Brazil, the findings revealed that older men experienced significant impacts on self-care, emerging the *totally compensatory system*, demanding actions from nurses, due to the impossibility of a person. Moreover, it was possible to observe movements to partially compensate for self-care deficit, not only related to preventing and coping with the transmission of COVID-19, but also to the protection of mental health and spirituality.

It is worth mentioning that it is common for older adults to live with processes of chronic illness, such as diabetes and hypertension, which require strict care regimes, such as management of signs, symptoms and treatment. Integrating these behaviors and continuing self-care during difficult life situations requires

skills in problem-solving, coping, and risk prevention. Therefore, nurses are essential in education/learning for the implementation and maintenance of self-care behaviors throughout life. In that regard, A study with 35 older Canadian adults showed that men over 75 years of age with a chronic condition were involved in some measure of self-care, due to addition of aging demands to those of chronic conditions<sup>(20)</sup>.

In 2021, a progression of the constituent elements of self-care was observed, with an intensification of self-care deficit potentiated by the pandemic, comprised of the triggering of injuries, exacerbation of chronic diseases and several others, with the need for medical care, evidenced by older men's demand for remote consultations<sup>(21)</sup>. Such situations were presented in the *partial system* and in the *totally compensatory system*, often representing a consequence of self-care deficit and a reorganization of life.

In this context, there is a need for health professionals, particularly nurses, to dedicate themselves to the care and education agenda for self-care, to redesign their interventions also for virtual environments of integrated care, essential in situations of social isolation, given the demand of older adults, who are also using technological resources to self-manage their health<sup>(21-22)</sup>. It was observed, through the speeches, that older men with greater access to technologies were able, in the pandemic, to exercise and experience healthier care practices, opening up the structuring of digital health<sup>(23)</sup> in Brazil.

The need for older men to establish partially compensatory mechanisms to overcome the deleterious effects on their health, in the intra and interpersonal dimension, was also observed. The *partially compensatory system* occurs when the person has the ability to perform self-care actions/activities, in a shared way, among family members, caregivers and the nurses themselves, according to Orem<sup>(10-12)</sup>, proving to be relevant for coping with COVID-19<sup>(13-23)</sup>, expressed in the speeches mainly in 2021. Furthermore, new self-care measures were built based on the search for the *educational/support system*, which refers to the person being able to carry out their actions and activities, which may undergo corrections by nurses<sup>(11-12)</sup>, with greater attention to health control, based on access to health recommendations conveyed in older men's means of coexistence.

With regard to self-care, the presence of requirements, such as physical activity, reported by older adults in 2021, has a therapeutic, neutralizing and modulating effect on physical, psychological and spiritual health situations and conditions, shaken by the health deviation resulting from the pandemic, considered as a prescriptive option for nurses working in the field of gerontogeriatrics for maintaining the physical and psychosocial well-being of the aged or aging male population<sup>(24)</sup>.

Regarding self-care deficit<sup>(7,10)</sup>, it was observed that the psychological need and the strengthening of affective bonds through social interaction with family members (group 01-2020) had a therapeutic effect. They can be social prescriptions used in nursing planning<sup>(25-26)</sup>, to strengthen affective bonds that tend to improve older men's communication, health, well-being and quality of life, for generating new meanings for their family resilience<sup>(27)</sup>, fulfilling the aspects of Orem's therapeutic demand for self-care in her family context<sup>(6,18)</sup>. Social prescription<sup>(27)</sup> is necessary and can help older men to face difficult contexts, such as the

pandemic, for promoting hopeful thoughts and support, which is a technology that nursing professionals can use whenever they identify their need, establishing direct communication with the support network.

In the Nigerian context, during the pandemic, the integrity of older adults was protected by home care plans, with appreciation of self-care monitored by professionals by remote means, aiming to reduce visits to hospitals and maintain control of chronic conditions common in senescence<sup>(28)</sup>.

The social isolation recommended for older adults population led to symptoms of depression and affective disorders<sup>(29)</sup>, with the abusive use of alcohol and other drugs, reported by XX men in the two years investigated, to cope with anticipated grief and the social and political crisis. Depressive symptoms are important markers for self-care compliance, and a study has shown that these are associated with a greater reluctance on the part of older people to discuss their self-care with professionals<sup>(30)</sup>.

In this study, older men who live alone also chose to live with pets, especially dogs, to strengthen their mental health, emotional support and socialization in daily life. This can also be considered a social nursing prescription<sup>(27)</sup> with a positive impact, as it reduces levels of stress and anxiety, raising the self-esteem of older adults, however, paying attention to the prevention of possible falls<sup>(31)</sup>.

According to Orem<sup>(7,12)</sup>, nurses can also manage the insertion of older adults in the Primary Health Care network and its continuous monitoring, urging the need to strengthen shared intersectoral actions<sup>(32)</sup>, especially to older adults, considering the shocks of the pandemic in this age context<sup>(1)</sup>. It is noteworthy here that, in order for older adults to take ownership of self-care, their learning needs to be developed throughout their lives<sup>(33)</sup>.

Overcoming the unfavorable outcomes of self-care through the strengthening and expansion of care practices and measures to face self-care deficit<sup>(11-12)</sup> has the challenge of effective results in population health, especially in specific situations of health deviation in vulnerable people, considering the lack of knowledge about self-care practices and limitations in access to health information<sup>(7)</sup>. Study with adult men with sickle cell disease<sup>(34)</sup> and older adults with diabetes<sup>(30)</sup> stated that ignorance leads men to expose themselves to risky situations and bad outcomes, which can be avoided by accessing information in nursing consultations<sup>(34)</sup>.

Older men, during the first two years of the pandemic, perceived different vulnerabilities that required adaptation and compliance with new patterns of self-care not experienced until then. Evolved with different self-care deficits and migrated from the pattern of independence of care to the *partial system* and the *totally compensatory systems*, especially when the effects of isolation and the disruption of provision of services by society to meet self-care requirements for development and health deviations were felt.

In critical moments of threat to community life, as in the experience of the pandemic, men are more demanded to reflect and assume their self-care. However, there are limitations derived from the hegemonic models of masculinities that imply on their socialization and learning, which can result in health

imbalance<sup>(35-37)</sup>, with expanding needs to *activate partially compensatory* and fully compensatory care systems when they become older men<sup>(38)</sup>.

### Study limitations

In this investigation, a qualitative study design was used, which does not provide for the search for generalization of findings regarding self-care actions and self-care deficit. In addition to this, only older men who access the internet and use technological resources (smartphones/computers) on a daily basis participated, with some social markers, such as sexual orientation and social class, which prevent homogenization.

### Contributions to nursing

The study contributes to the field of investigation and professional practice related to self-care of older men's health, also promoting advances in scientific knowledge and in the practical applicability of nursing theory, pointing out specificities of the pandemic for self-care and significant elements in self-care deficit among older men. Orem's idea guides the work of nursing in the development of independence and co-responsibility, which integrates older adults, affective network, nursing and environment, systematically complying with the general metaparadigms of the profession.

### FINAL CONSIDERATIONS

The deleterious impacts of the pandemic context (damage/uncontrol to physical, mental, affective-marital, social and political health) produced deficits in self-care, intensified in the face of the extension of the pandemic for more than a year. In view of this, they affected and mobilized the leader men regarding the *totally compensatory system*, crossed by pandemic stressor events, *partially compensatory system*, to sublimate the socio-affective distance imposed by isolation/loneliness, and *educational/support*, in the search for self-care and health care, marked by digital induction. Positive contributions were evidenced in the intra and interpersonal health dimensions.

In the intrapersonal dimension, attitudes and skills of incorporating self-care, the recognition of one's own vulnerability were highlighted, perception of changes in mood, energy and rhythm for daily activities and worsening of pre-existing conditions, access to books, the internet and social networks, and conditions to access services, face-to-face consultations and Teleconsultation. In the interpersonal dimension, older men's effort to seek social support through the extended network of family and friends was recorded, who found the support of specialists and professionals from the family health team as facilitators.

This study has implications for nursing science and practice, when discussing self-care and self-care deficit of older men throughout the pandemic, because it highlights the importance of continuing health education practices, welcoming strategies, communication and self-care, integrated into the virtual environment.

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