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EXPERIENCES OF NURSES CONTAMINATION BY SARS-COV-2

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Abstract: Introduction: The experiences of contamination by SARS-COV-2, in nurses, are a consequence of work compliance, ethical, continuous, exhausting, in a context of isolation and overload, and can only be perceived by those who lived them, in their subjective expressions, personal. **Objective**: To recognize the perceptions of the contamination experiences of nurses infected with SARS-COV-2, during confinement; **Methodology**: cross-sectional, qualitative and phenomenological study, carried out from the content analysis methodology, based on two elements: the sentence construction and the phoneme - to the data, collected through the application of a semi-structured interview -via online- to a sample of 33 infected and isolated nurses, from the north, center and south of Portugal. The sample is mostly female (68.8%), in the age group (34.4%) between 21-30 years old, lives with the family (84.8%), with at least three people (57.5%). The analysis identified seven strong categories and six weak categories. **Results**: From the analysis of the discursive components in each Interview (E), a Categorical Tree (CA) emerged with two generations of categories, which express the senses and meanings attributed by the participants to the phenomenon under study. The first global category: "Living with SARS-COV-2 contamination", inserts the first-generation category: "Changes in life in isolation" (1.1), which in turn gives rise to two second-generation categories: "Difficulties/ Disorders" (1.1.1) and "Adaptive Strategies" (1.1.2). From the subcategory "Difficulties/ Disorders" (1.1.1), seven third-generation categories emerge about the contexts of difficulties: "Emotional" (1.1.1.1), "Personal" (1.1.1.2), "Family" (1.1.1.3), "Social" (1.1.1.4), "Professional" (1.1.1.5), "Financial" (1.1.1.6) and "Good in life" (1.1.1.7).From the subcategory "Adaptive Strategies in the Context of Contamination/ isolation" (1.1.2), three third-generation categories emerge regarding the strategies applied: "Personal" (1.2.2.1), "Family/friends" (1.2.2.2) and "Everything is fine" (1.2.2.3). In turn, the subcategory "Personal strategies" (1.2.2.1) includes three fourth-generation categories: Expressions of personal organization, at the "Biological" level (1.2.2.1.1), "Psychological" (1.2.2.1.2) and "Social"(1.2.2.1.3). Conclusions: The perceptions of the experiences of contamination of nurses infected by SARS-COV-2, during confinement, took place predominantly at an emotional level (153 discursive units - UD) and the adaptive strategies, mostly adopted, took place at a personal level (63 UD) . The complex contextualization of the phenomenon makes it pertinent to propose new studies on this reality lived alone.

Keywords: Contamination; SARS-COV-2; Nurses; Isolation

INTRODUCTION

The current global pandemic context caused by the SARS-COV-2 coronavirus, triggered situations in humanity that it had to face, in the sense of survival and the quality of that survival in the short, medium and long term. Without previous experiences, humans lived in constant changes, each phase of infectiousness and confinement, in a constant process of scientific research and theorization, from which the best experiences were not always collected. The unpreparedness of the National Health System regarding material, technical, architectural and human resources, due to the lack of knowledge about the disease, contributed to the existence of a large number of infected health professionals. in greater numbers (WHO, 2020).

This study intends to approach in depth the personal and unique process of living in a context of isolation. The state of contamination and the context of isolation can only be

perceived by those who experience them, in their more or less achieved expressions.

It is precisely here, in the need to create this knowledge, that the relevance of this research is placed.

FRAMEWORK

The COVID-19 pandemic has placed a large number of health professionals in a context of isolation, as these professionals are directly involved in the care of patients infected with SARS-COV-2. There is evidence indicating that most health professionals were infected in their workplace (Jin et al., 2020 and Lai et al., 2020).

The literature that addresses nurses' feelings and emotions during their experiences of SARS-COV-2 infectiousness is scarce. However, Jin et al. (2020) refer, in their study, that of the 103 health professionals surveyed, 55 were nurses, and concluded that 88.3% of the responding health professionals experienced psychological stress or emotional changes during the period of isolation, while the minority, 11 .7% of those studied did not show emotional changes. In the 88.3% of the sample under study, and mentioned above, psychological stress or emotional changes were caused by: (a) contexts related to the disease in 81.3% of the elements of the sample, (b) by concern with the health of their family, in 57.1% of the professionals in the sample, (c) stressful feelings emerged due to negative news on the internet in 39.6% of the professionals, (d) due to changes in the environment in 36.3% of the respondents, (e) for being discriminated against by others, in 28.6% of the professionals and (f) only 1.1% of the elements of the sample were worried about the economic situation. The health professionals used effective adaptive measures to control their emotions or stress, such as: self-regulation in 83.5% of the sample elements, communication with others on WeChat in 75.8% of professionals, video call with family or colleagues in 72.5% of respondents, literature review in 26.4% of the elements of the sample, avoid information in 22% of the professionals and the search for psychological support in 12.1% of the respondents. With 75.8% of the teams actively expressing their psychological stress, as opposed to a minority, 24.2%, who did not.

Patients with confirmed or suspected SARS-COV-2 may fear the consequences of infection with a potentially fatal new virus, and those in quarantine may experience boredom, loneliness and anger. In addition, symptoms of infection, such as fever, hypoxia, and cough, as well as adverse treatment effects, such as corticosteroid-induced insomnia, can lead to worsening anxiety and psychological distress (Xiang et al. 2020).

In order to understand the reactions and feelings of frontline professionals in the care of hospitalized patients with suspected COVID-19, the study by Paula et al. (2021), carried out with a sample of 19 health professionals, in that 24% were nurses, 43% were nursing technicians, 22% were doctors and 11% were physical therapists, referring to feelings such as: motivation, willingness to contribute, feelings of fear, anxiety, obligation, concern for death, sadness, discrimination, isolation, prejudice, uncertainty and doubts about the future.

The INTERNATIONAL COUNCIL OF NURSES (2020) refers, based on reports, to the psychological suffering of nurses in the response to COVID-19, such as Burnout, anxiety, depression and fear of stigma and discrimination, which are the most common problems of mental health referred by nurses who are on the front line.

INVESTIGATION QUESTION

What are the perceptions of the experiences of contamination - from the personal and

subjectivized perspective of nurses infected by SARS-COV-2, in the 2020 pandemic in Portugal, during confinement?

MATERIAL AND METHODS

To access the meaning of the speeches, a transversal and exploratory study was designed, with a qualitative and analytical design. Considering the variable under study, it was assumed that the study must be situated in a qualitative paradigm, conceived from the "phenomenological perspective" to make sure that the phenomenon would be accessed, through the sense and meaning, emerging from the discursive components of the subjects who experienced the phenomenon under study. Thus, the methodological path refers to the typology of qualitative research, supported by the concepts of "Mead's symbolic interactionism and Garfinkel's ethnomethodology" (Coutinho, 2019, p.17), in which the researcher, admittedly, is one of the interpretive actors of the real, it is also the "builder of knowledge" (Coutinho, 2019, p.17).

An intentional sample was selected, that is, one that had experienced the phenomenon under study, and therefore, was assumed to be representative of it. It is, therefore, not representative of a population, as is assumed by the quantitative methodology, from the point of view of results. It is only located in a population – from which there is still no publication with assumed numerical results – and only intends to be representative of the phenomenon under study. In this investigation, the respondent sample consisted of 33 nurses from the north, center and south of Portugal, who experienced SARS-CoV-2 infection differently during the first and second confinements of the 2020 pandemic, and which represents a population of all nurses. infected in the time of COVID-19 in the same period. All nurses who were infected with SARS-COV-2 after December 2020 and those who somehow refused to respond to the interview were excluded.

The sample is non-probabilistic of the "snowball" type, for the development of which an element of the target population was identified (nurse infected by SARS-COV-2 during the first and second confinement of the year 2020) and who was requested, to identify other nurses who had been infected and who, therefore, could methodologically be inserted in this same population (Coutinho, 2019; Ribeiro, 2010).

To constitute the sample, 38 nurses were contacted through primary, secondary and tertiary contact networks, the starting point being an inpatient unit of an institution in the north of Portugal.

The data collection instrument used was the semi-structured interview (Coutinho, 2019, p. 141), as it brings together the characteristics that best fit this type of study, and because, based on the assumption of the phenomenological perspective, it makes perfect sense, that in addition to the questions posed by the researcher, new questions may arise – in the sense of current and or unpublished – from the answers presented to the initial questions.

Thus, based on the analysis of the literature, an interview guide (Gomes, E. & Veiga-Branco, MAR) was initially prepared, which includes the variables exposed in the literature, and already presented, for what is considered the context and sites of infection, available in online format, through Google Forms, with open and closed questions (Coutinho, 2019, p. 141). Due to physical distancing and minimization of face-to-face interaction (Coutinho, 2019, p. 141), nurses were invited to participate in the research, through an initial professional contact, respecting the assumption of avoiding physical contact, and, from this starting

point (Coutinho, 2019, p. 142). The full transcript of the interviews has the pages and lines marked, so that the discursive units can be located, selected and used in content analysis. The descriptive information was organized and reduced in order to enable the description and interpretation of the phenomenon under study, through the coding methodology (Bravo, 1998, and Wiersma, 1995, mentioned in Coutinho, 2019, p. 216). Critical discourse analysis was carried out with some recourse to Fairclough's methodological conception (Fairclough & Melo, 2012; Onuma, 2020) in which the analysis emerges under three dimensions (three-dimensional model of discourse) simultaneously: the description of the text, the practice of discursive interpretation, and social practice in explanation. Thus, and based on these assumptions, a categorical tree with three generations emerged, which in an organized way, express the perspectives and meanings attributed by the participants to the phenomenon under study, from a holistic point of view. All research obeys the ethical code (Ribeiro, 2010).), in order to safeguard the assumptions enshrined in the Declaration of Helsinki and the Oviedo Convention.

RESULTS

The first global category: "Living with SARS-COV-2 contamination", inserts the first-generation category: "Changes in life in isolation" (1.1), which in turn gives rise to two second-generation categories: "Difficulties/ Disorders" (1.1.1) and "Adaptive Strategies" (1.1.2). From the subcategory "Difficulties/ Disorders" (1.1.1), seven third-generation categories emerge about the contexts of difficulties: "Emotional" (1.1.1.1), "Personal" (1.1.1.2), "Family" (1.1.1.3), "Social" (1.1.1.4), "Professional" (1.1.1.5), "Financial" (1.1.1.6) and "Good in life" (1.1.1.7).From the subcategory "Adaptive Strategies in the Context of Contamination/ isolation" (1.1.2), three third-generation categories emerge regarding the strategies applied: "Personal" (1.2.2.1), "Family/friends" (1.2.2.2) and "Everything is fine" (1.2.2.3). In turn, the subcategory "Personal strategies" (1.2.2.1) includes three fourth-generation categories: Expressions of personal organization, at the "Biological" level (1.2.2.1.1), "Psychological" (1.2.2.1.2) and "Social" (1.2.2.1.3).

The first generation category: "Changes in life in isolation" (1.1), presents the discursive units, which reflect the "Difficulties/ Disorders" (1.1.1) experienced by nurses during their state of infection/isolation. From this 2nd generation subcategory "Difficulties/Disorders" (1.1.1), seven third generation categories emerge about the contexts of difficulties: "Emotional" (1.1.1.1), "Personal" (1.1.1.2), "Family" (1.1.1.3), "Social" (1.1.1.4), "Professional" (1.1.1.5), "Financial" (1.1.1.6) and "Good in life" (1.1.1.7).

What difficulties on an Emotional level?

The subcategory "Emotional" (1.1.1.1), assumes the status of major category, is the most prevalent, presents 153 discursive units (UD) and is illustrated by expressions such as: "…Sadness" (23 UD), "…Fear" (23 UD), "…Anguish" (21 UD), "Personal impotence in the face of the situation that happened to me" (20 UD), "...Revolt" (16 UD), "…Guilt" (9 UD), " …Anger" (3 UD), "Misunderstanding by others" (2 UD), "…Anxiety" (2 UD) and "…Loneliness" (2 UD).

It also presents other expressions of a sad and difficult to manage character: "…missing close family members…" (E5), "…impotence in the face of the situation" (E5), "Fear of infecting family members…" (E17), "I was just afraid the spread [and] isolation was not the worst part, but if I had already infected someone else" (E20) and "Concern about my

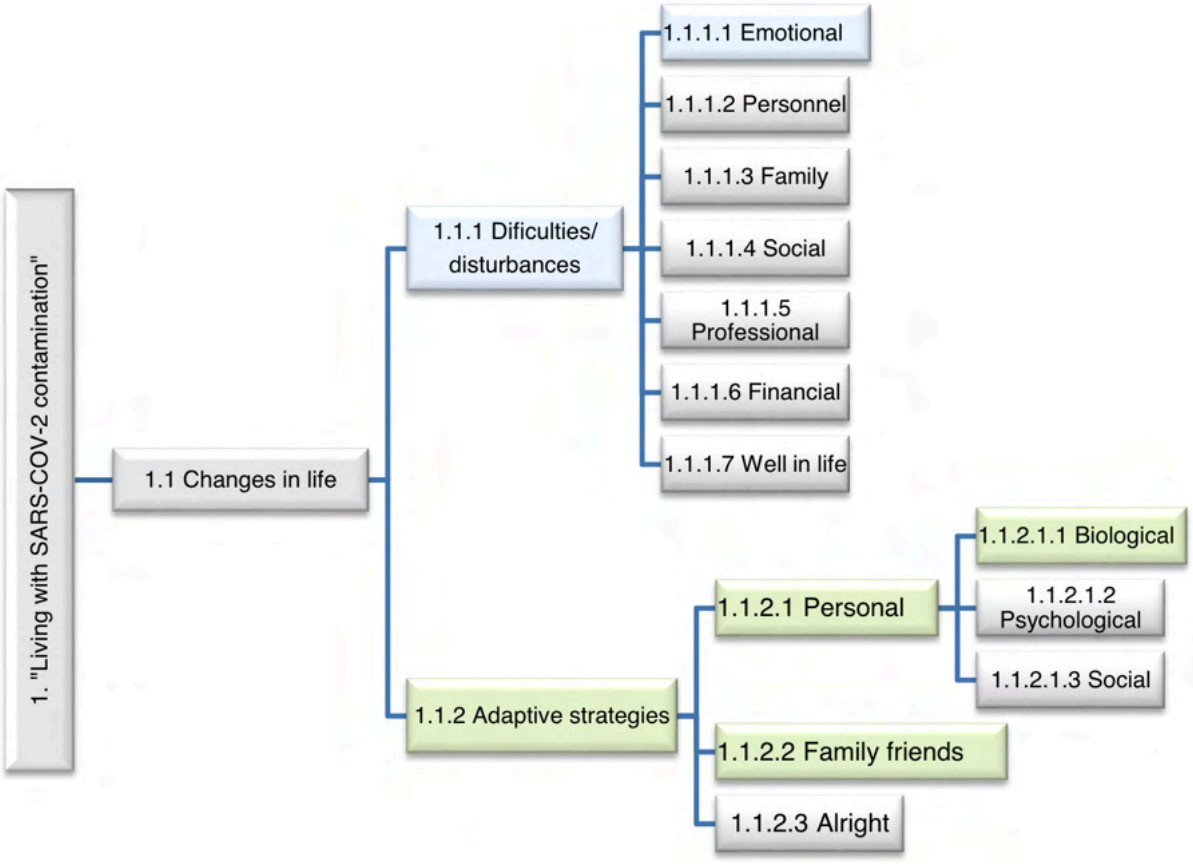

Figure 1: Hierarchical presentation of the category tree relative to the Main Category and second, third and fourth generation categories.

health status, with the possibility of infecting the rest of the family…" (E23).

Negative feelings were always a constant: "…depressed, difficulty sleeping, anguished with the uncertainty of the evolution of the disease…" (E24), "No patience for phone calls with the family!" (E25), "Anxiety, knowing that my children were positive…" (E26), "Blame for having allowed the dinner where we think the contamination occurred…" (E26), "Anger because the person who infected me knew who had had contact and did not appreciate it…" (E26) and "…paranoia…" (E28), "… Tranquility…" (E32), "The fear of contagion remained for practically the 2 months…" (E33), " At first fear, fear of losing life. every time I closed my eyes to sleep, I was very afraid of not waking up…" (E33).

Unexpectedly, highly disturbing emotions arise that will remain in the post-covid time, such as: "...guilt for having infected my daughter" (E33), "Frustration with each positive weekly test..." (E33), "The feeling of guilt for having put someone at risk is distressing..." (E33), "I have never been so sick in my life..." (E35), "Despite the support from family and friends via telephone, feeling of loneliness..." (E37), "… anxiety for being trapped and alone…" (E37), "The fact that it rained a lot at that time also prevented me from coming to the balcony or terrace to get some air... I had to be trapped inside..." (E37)) and "Fear of respiratory symptoms getting worse and having to go to the hospital..." (E37).

And having the evidence of having a death alone, as in bad times "…I had the feeling that

I was going to die alone, because I didn't want to contaminate my family…" (E35), "I just thought I would die without seeing my family again " (E36), "…atrocious moments, anxiety, violent emotions, loneliness…" (E36) and "… the uncertainty that awaited me…" (E36).

The importance of the family in people's lives "...I was always waiting to hear my daughter's voice..." (E36), "The following days were really difficult, either because of the illness or for the family..." (E36), " …I wanted to see my daughter and wife, to tell them how much I loved them…" (E36), "Not being able to help my father when he burned his foot when he brought me hot soup, having … spilled it when he arrived at my house. .." (E37), "Psychologically it was not easy, I had just ended a relationship, I was taking a measurement for depression, managing all these symptoms, feelings and emotions was difficult..." (E37) and "…fear of being able to infect my parents when they were there, even though they were away, and because they took the washed Tupperware to their house..." (E37).

And on a personal level, how was it?

Regarding the subcategory "Personal" (1.1.1.2), it presents 58 discursive units that explain the difficulties experienced on a personal level, and inserts expressions such as: "Isolation in the bedroom…" (3 UD), "… Isolation…" (2 UD), "Family isolation…" (E1), "Being away from my children, fear of infecting the rest of the family (E3), "Isolation at home, with the use of a mask, hand disinfection and use of gloves" (E4)," …isolation from the rest of the household" (E4).

In addition to social isolation, isolation within the house itself "I started to use only the bedroom and bathroom, I always disinfected my hands before touching something, my garbage was put aside, the clothes too, the dishes were always machine washed" (E5), "Psychological fatigue due to being isolated in the room without any kind of outside contact" (E6), "…lack of usual routine" (E5), "…isolation without any contact" (E6), "Use of a mask 24/7" (E6), "…less motivated…" (E7) and I always tried to avoid contact with objects that could be places of [risk] this common and to increase the disinfection care of spaces used (E7).

No longer being able to dedicate oneself to others "Difficulty in accepting that I was not being useful…" (E7), "Being isolated and knowing that it was necessary elsewhere…" (E8), "I kept all the inherent care… of respiratory hygiene" (E8), "…Isolation at home…" (E10), "Total isolation at a personal and social level…" (E11), "Use of a mask in common areas of the house and redoubled hygiene and disinfection care" (E11) " …this situation forces us to socially isolate and not have contact with risk groups, to which some of my family members belong" (E13), "… changes I had to make in my routine…" (E13), "I was isolated in a room with bathroom…" (E35), "Even more contact precautions; avoid unnecessary contacts…" (E16), "Time of isolation difficult to manage…" (E16), "…lack of contact with family members…" (E16), "Need for isolation and constant distancing, disinfection of hands and surfaces, ventilation constant use of a mask" (E17), "I started to avoid surroundings…" (E18), "I complied… isolation according to the DGS standard" (E20),

In the impossibility of being close "… contacts became technological" (E20), "I use a mask to go to the toilet. Hand disinfection and washing" (E21), "…isolation from all other family members" (E23), "They left meals at the door of the room. When they left, I would look for them. Dishes collected with contact precautions and washed separately. Whenever I left the room (rarely) it was with a mask and gloves and with due distance from the others. In addition, frequent hand washing

and maintenance of respiratory etiquette. Washed clothes separately" (E23), Living the physical separation "I lived alone during the quarantine, the family went to another house..." (E24), "Leaving the room only 2 times a day to go to the toilet and prepare food, mask in house, see the neighbors at the window to air the room, take a shower at the end of the housemates. Much more bleach at home…" (E25), "…dependence… insomnia, family separation, use of a mask at home and constant cleaning and disinfection of the house…" (E28), "…separation…" (E28), "Need for maintain the necessary care to avoid contagion, leave the house only when strictly necessary, reduce contact with more distant family members as much as possible" (E30), "Isolation at home, use of spaces separate from other inhabitants. Use of masks and other precautionary measures…" (E32) and the "Room [was] ventilated every day" (E35).

The distancing of the family even before being infected "The isolation was carried out in a room in the house, where I had been staying overnight for about 1 month before to somehow protect my family" (E33), "To avoid handling dishes or dirty clothes, I put on a mask, sanitized my hands well and took the dishes/clothes to the machine that was already open, usually at the end of the day, trying not to touch the handrail of the stairs, the switches. everywhere" (E33). The constant fear of contaminating others "No one got in my car!" (E33) and "At first it was as if we felt "dirty"; the almost exaggerated hygiene care, cleaning the bedroom and bathroom several times a day, airing the space, even on the coldest days." (E33).

Complications caused by the disease "In the most serious phase of the disease, there was a day when I was disoriented (I don't remember much)" (E33), "The symptoms… limited me in the routine that I tried to maintain despite the space. Even talking on the phone tired me a lot" (E33), "I felt deprived of my freedom as a person" (E34), "I only saw one employee sporadically" (E36), "…atrocious symptoms of the disease starting of hydroxychloroquine..." (E36), "During hospitalization, recovery was very, very slow, I didn't sleep, I didn't have the strength..." (E36), "One day in the morning... I saw myself in the mirror, it wasn't me... loss of 6 kilos" (E36), "I was isolated for 21 days alone at home (E37), "…I saw my parents away...". (E37), "Having to call my mother to take my father to a clinic to give him a dressing at the burn site, not being able to take care of him and get close to him.…" (E37) "Having to depend on my parents to have food" (E37).

A problem for those who live alone "Difficulty in accessing essential goods, such as food…" (E4)

And how was it at the Family level?

The 3rd generation subcategory "Family" (1.1.1.3), has 22 discursive components and is illustrated by the expressions: "…concern about the children's school situation" (E4), "All areas were disinfected…" (E6), "Stress… family" (E14).

The sharing of those who were not confined to themselves "Only sharing the house with the wife" (E11), "…I felt immense support, which was fundamental to overcome the personal, social and emotional changes that isolation led to" (E23), "We were in isolation as a family. Because the entire household tested positive…" (E26), "Family, in prophylactic isolation, good understanding and knowledge…" (E32), "…my oldest daughter also tested positive, ending up being isolated with me, sharing the space…" (E33),

The importance of family support "Help[from] a housemate (E21), "Meals and other household chores and care for the youngest daughter were in charge of the husband, who placed meals or other necessary

things at the bedroom door " (E33), "The bedroom and bathroom door were always closed to protect the rest of the family" (E33), "My youngest daughter put food or other things for us at the bedroom door, knocked on the door and ran downstairs before we could open the door…" (E33), "…my husband was worried in the hallway asking if everything was okay…" (E33), "…my husband came to bring food … with a P2 mask and took it with glove[s]. Then he would always disinfect his hands" (E35).

Family relationships under construction "…allowed us to strengthen ties…" (E33), "The youngest daughter "grew up" and had household chores to do" (E33), "…made us "re"-get to know each other better,… as parents, as a couple…" (E33), "…we were together…" (E33), "Coming home was a mixture of sensations, one for being at home, the other for being able to contaminate my family. I don't remember anything, just arriving at my room and seeing a table at the entrance of the room and another one in the room, with support material (EPIS)" (36), "... my parents took me food once a day and left them outside..." (E37), "...despite having had a visit from my parents, sister/godaughter, two friends on the street..." (E37), "I always made recommendations for them to put [the tupperware] in the machine again when they got home and disinfect their hands" (E37).

What about the Social and Professional component, how was it?

The subcategory (1.1.1.4) "Social", is expressed in the words of the following discursive components: "Socially and professionally, the stigma of society (E1), "… there was a need to take a break…" (E4), "… children's school situation... there was not always a response from the school in the sense of adapting to the reality in question" (E4), "There was no longer much social interaction in personal life" (E8), "...no social contact..." (E10)), "…the fact of not being able to live with others, the way I used to live…" (E13), "Stress… social…" (E14).

The subcategory (1.1.1.5) "Professional" has 15 discursive units and is based on the expressions: "…professional absence during isolation" (E1), "Socially and professionally, the stigma of society" (E1)," … need to take a break…" (E4), "…I felt that I was not being enough when I was not exercising…" (E7), "Refusing to perform nursing duties without adequate Epi's" (E9), "Professional stress… " (E14), "…lack of support from managers/ institution" (E22), "…not being able to help co-workers who were overloaded with work…" (E23),

Professional projects postponed "Professionally, the work schedule was changed from shift work to morning work by the Occupational Health Doctor" (E33), "At a professional level, many projects were lost, since the second job, teaching, mentoring students in internship2 (E36), "Being limited to working one shift a day, as indicated by the occupational medicine" (E36), "At a professional level, I felt concern/powerlessness because I knew that my patients would be without support given that my absence was not replaced by another professional" (E37), "...the fact that I left several things arranged and scheduled also affected me because from one day to the next everything changed..." (E37), "I didn't have the opportunity to leave things guided..." (E37), "I tried to help [from a] distance, but it was very painful..." (E37).

And on a financial level?

The subcategory (1.1.1.6) "Financial" inserts the following discursive units: "Mostly financial difficulties" (E10), "Economic [difficulties]" (E28), "… it was considered an occupational disease paid 100%, so I'm still waiting for the process and the respective compensation" (E33), "Wife had to stay off for a month to take care of me" (E36), "...it was

my parents who helped me, because I had 8 months at home and my wife 1 month, with the housing loan and the car loan, it was not easy, I had to ask for help, yes…" (E36).

The subcategory (1.1.1.7) "Well in life" is based on the following expressions: "Without difficulties or disturbance" (E11), "There were no changes in my life, I already put in practice basic precautions and social withdrawal" (E22), " … I didn't feel any changes, since the salary was maintained…" (E23), "I had no financial repercussions" (E26), "I didn't feel practically any disturbance" (E31, P57, L1781), "…it was a period of "vacation "..." (E32), "Few difficulties..." (E32), "no impact" (E32), "The financial issue was not a central concern, stability allows fulfilling responsibilities, without additional concerns" (E33).

WHAT ARE THE "STRATEGIES" ADOPTED BY NURSES?

In the 2nd generation category "Adaptive Strategies"(1.1.2), the discursive units emerge through the 3rd generation categories: "Personal"(1.1.2.1), "Family/friends" (1.1.2.2) and "All right "(1.1.2.3), the strategies adopted by nurses in order to minimize the impact caused by the state of contamination/isolation in their lives. From the subcategory "Personal" (1.1.2.1), 3 4th generation categories emerge: Expressions of personal organization, at the "Biological" level (1.1.2.1.1), "Psychological" (1.1.2.1.2) and " Social" (1.1.2.1.3).

Biological adaptation…

The 4th generation subcategory (1.1.2.1.1) "Biological", is the most predominant, assumes the status of major category, presents 24 discursive units and is based on the expressions: "Positive thinking…" (2 UD), "… patience …" (2 UD), "…Resilience…" (E33), "Thinking positively" (E9), "Thinking that tomorrow will be a better day than today" (E2), "Hope that each day would pass without complications " (E3), "Distracting myself as much as possible…" (E6), "…dealing with [and] pending matters" (E17) "Maintaining routines" (E18), "Doing the isolation together" (E8).

Inventing tasks "…staying proactive…", "…completing postponed tasks, such as DIY, gardening…" (E32), (E8), "Giving time to time…" (E25), "…I dedicated myself to the family and myself…" (E30), "Keep calm…" (E31), "…comply strictly with rest and isolation" (E31).

On the way to rehabilitation "Doing physical exercise (E29), "…self-rehabilitation…" (E33), "…the balcony allowed us to "bathe sun", have meals, "walk", physical exercise, socialize (at a distance) with friends, neighbors and family members who "warmed the soul" …"(E33), "Trusting whoever was outside the room! In the husband, in the youngest daughter. the rest of the house and our "survival" depended on them!" (E33), "Doing things I like" (E37), "…sleep/rest, make an effort to eat because I had no appetite, I lost weight and muscle mass..." (E37).

And on a psychological level, how was it?

The subcategory(1.1.2.1.2) "Psychological", is based on 22 discursive units such as: "… reading…" (2 UD), "…reading…" (2 UD), "… Studying…" (E5), "…watching television…" (E10), "…focusing on the good things" (E17), "…making future plans" (E17), "… watching series…" (E23), "…watching movies and series… " (E32), "…watching classes…" (E23), "Acceptance…" (E14), "… accepting the situation" (E33), "Accepting the event without guilt and without creating expectations in relation to others" (E32). E22), "…Adaptation…" (E28), "…I couldn't deny it, I couldn't take the risk of putting others in danger" (E33).

Positive thoughts began to emerge "We are stronger than we think!" (E33), "… doing nothing is the best solution…" (E33), "Believing that everything will be fine…"

(E33), "…I saw series…" (E35), "…I had the need to resort to health professionals, namely Psychiatry and Psychology who helped me to overcome some emotional/psychic sequelae that the disease had left" (E36), "…listening to music, reading inspiring and self-help things, lighting the fireplace…" (E37).

And on a social level?

The subcategory (1.1.2.1.3) "Social", presents 17 discursive units and inserts expressions such as: "…contact by phone with family and friends" (E7), "Videoconferences with friends and family" (E10), "…contact … through technology, with family and friends" (E20), "… [contact via] social networks" (E13), "…vent with friends…" (E16), "…talk to friends on the phone…" (E23), "Frequent telephone contact with family" (E24), "… [use] social networks to talk to friends" (E24), "… talk to friends and family…" (E17), "Communication with family and friends… " (E21), "Family dialogues (E26), "Sharing feelings…" (E26), "I spoke with family and friends by video call…" (E35). Being able to ask for help "... I asked for help, it was a light that came to lighten the tunnel that was so dark..." (E36), "... talk to the people I love..." (E37), "... feel that despite the limitations they friends left cuddles at the door..." (E37), "… feeling that I had the support of others" (E37).

And with family and friends?

The discursive components that gave rise to the subcategory (1.1.2.2) "Family/ friends" are expressed by the words: "… family support…" (4 UD), "I won't be able to go on overnight! I have no home for isolation alone!" (E25), "…friends, from a distance or over the phone, were always present" (E33), "My parents, family and friends, with their words and "pampering" (…) they brought strength and hope…" (E33)), "…there was a problem and everyone "worked" in the same direction, (…) with their efforts, but all in the same direction" (E33), "Wife had to stay off for a month to take care of me" (E36)), "Ask for all kinds of help from the closest family members…" (E36).

In this study, it was found that some of the nurses who responded did not experience major disturbances in their lives, and those who did, always found well-adapted resources to overcome them. This phenomenon is revealed in the third generation subcategory (1.1.2.3) "Okay", inserts expressions such as: "Generous housing helped a lot…" (E11), "…at the family level, everything remained practically the same, a since we can keep in touch because we live in the same house" (E13), "My house has a space, and conditions that allow isolation without difficulties" (E32) and "I believe that having good housing conditions, different floors, rooms with good areas, several bathrooms, a spacious balcony, allowed to attenuate the restrictions a little" (E33), which explains the facilitating conditions experienced by nurses.

DISCUSSION

It started with the objective of recognizing the perceptions of the experiences of contamination of nurses infected by SARS-COV-2, in the 2020 pandemic in Portugal, during confinement.

In this study, it was found that the vast majority of respondents - 93.9% of nurses - assumed that they had emotional changes, from the moment they had factual knowledge of their diagnosis, a phenomenon that corroborates the results of Jin et al. (2020), who found that 88.3% of the health professionals in their study experienced psychological stress or emotional changes during the isolation period. According to the sample, being infected transforms the perspective of life and living conditions. The experience of living through the infection and isolation made different perspectives of

feelings emerge in each person, regarding the same living conditions.

Life Changes…. Among the difficulties and adaptations

The infected situation caused changes in the lives of nurses. These changes took place on an emotional, personal, family, social, professional and financial level. At an emotional level, negative emotional states were notorious, which, corroborating Jin et al (2020), are identified as: anger in 12.1% of the respondents, for having been contaminated by someone they knew they had had contacts. with the study by Xiang et al. (2020), who report that quarantined SARS-COV-2 patients may experience rabies.

In addition to this, the feeling of guilt, revealed in 27.3% of the nurses, emerged, for having infected other people and for having felt that they had prevaricated in their behavior and had not respected the epidemiological norms of blocking the infection. This feeling does not corroborate, but finds a small similarity, in the results of Jin et al (2020) when presenting the concern for the health of their family, in 57.1% of the professionals in that sample. fear for the same reason, as will be seen below. The feeling of incomprehension on the part of others, assumed by 6.1% of the sample, corroborates the already surprising result found by Jin et al. (2020) by revealing that 28.6% of their studied professionals felt discriminated against.

In addition to these feelings, this study is unique for not finding other results that present human contexts in which sadness emerged, - here assumed in 69.9% of nurses, - and fear: the fear of the evolution of the disease, the fear of power contaminate the family, and death in 69.9% of the participants. As if these fears were not enough, the nurses embody the meanings of anguish due to the uncertainty of the evolution of the disease, and for having to be confined, which is assumed in 63.3% of the elements of the sample.

There was also personal impotence in the face of the situation and towards others in 60.6% of the sample, and following this impotence, revolt is assumed by 48.5% of the participants. In addition to these, anxiety and loneliness are highlighted, the latter corroborating the study by Xiang et al. (2020) who report that patients with SARS-COV-2 in quarantine can feel loneliness and longing - a peculiar feeling in a Portuguese sample - due to the isolation of the family in 3% of nurses.

The biggest change

On a personal level, family and social isolation was the change most mentioned by nurses. The use of a mask, gloves, constant hand disinfection in the common areas of the house, airing the room, disinfection of the spaces used, and the treatment of clothes and dishes separately, were the resources used to prevent the spread. of infection. In the study by Jin et al. (2020), of the 38 professionals who isolated themselves at home, 76.3% used a mask at home, 89.5% did not leave the house during the isolation period and 71.1% of the professionals changed masks in less than 8 hours. The majority of healthcare professionals regularly checked their temperature at home, washed and disinfected their hands frequently, and had independent eating utensils.

The role of the family was preponderant in this change of life. All support in terms of food, clothing and essential goods was provided by the family, which made "closer ties" with the various elements of the household. Concern for the children was a constant, since they also had to be in isolation. In cases where the entire household tested positive, they became a source of support for each other.

The deprivation of social life is not always well accepted, the lack of interaction with others makes people more anxious. Society did not always provide the necessary answers

to those who had to be isolated. Schools were not adapted to these situations, they did not articulate face-to-face teaching with distance learning for students in the same class. The stigma of society mentioned by one of the nurses is corroborated by the study by Jin et al. (2020), when he mentions that one of the causes for psychological stress is "being discriminated against by others", because of having been infected. In order to understand the psychological suffering of nurses in the response to COVID-19, the study by Paula et al. (2021) and the INTERNATIONAL COUNCIL OF NURSES (2020), mention fear of stigma and discrimination as two of the most common problems.

At a professional level, the feeling of incapacity for not being able to help colleagues due to overwork and frustration for having left unfinished business was evident. Some nurses refer to this phase of their lives as a break or a vacation. The resumption of professional life underwent some changes due to complications that remained in the post-covid period, that is, it forced changes in working hours and the lack of ability to continue some professional projects.

Financial difficulties are mentioned by 12.1% of nurses. One of the causes of these difficulties is due to the fact that one of the members of the couple has to be on sick leave in order to be able to support the spouse (infected nurse). At the beginning of this pandemic, SARS-COV-2 infection was not considered an occupational disease, so sick leave was not paid 100%, and it became 100% paid for all nurses from June 2020 (DGS, 2020). Another cause for economic difficulties arises, as nurses are no longer able to accumulate functions, so the monthly income depends only on sick leave related to the main job. In the study by Jin et al. (2020), only 1.1% of the elements in the sample were concerned about the economic situation.

It was also found that 12.1% of nurses did not experience difficulties, which means that the vast majority, around 88%, felt them. In that small group, they claimed to have a house with generous conditions and dimensions, which allowed isolation without difficulties, which corroborates the study by Jin et al. (2020), that 11.7% of those studied did not show emotional changes. Regarding the financial variable, 9.1% of nurses reported no repercussions.

Adaptive Strategies

Nurses used adaptive strategies, namely at a personal level, from a biological, psychological and social point of view. From a biological point of view, measures are listed such as: adopting positive thinking, being patient, being resilient, adopting distraction measures such as doing DIY and gardening and staying proactive. Other measures were verified, such as physical exercise promoting self-rehabilitation in order to avoid sarcopenia, promoting socialization with others at a distance, trusting caregivers, as the survival of those who need care depends on them, resting and making a good nutrition.

From a psychological point of view, nurses resorted to reading, studying, watching television, such as watching movies and series, listening to music, studying and attending classes, those in training, focusing on the good things, accept the situation without guilt and adapt to the new situation. Resorting to the help of health professionals, such as psychologists and psychiatrists for psychological support, as seen in the study by Jin et al. (2020), that 12.1% of health professionals sought psychological support.

In adaptive strategies from the social point of view, nurses adopted some measures, giving high importance to communication with family and friends, from family dialogues to sharing feelings. Communication can be done by telephone, by video call, by the most varied

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technological means and by social networks. Feeling support from others is extremely important. In the same way, it is also verified in the study by Jin et al. (2020), that in 75.8% of the professionals, communication with others is carried out through WeChat and in 72.5% of the elements of the sample it is done by video call with family members or colleagues.

Another strategy adopted in relation to family and friends was the involvement of everyone in the new situation. All the help and support that came from family and friends was felt as positive energy and a gift of hope.

In the study by Jin et al. (2020), health professionals also used other effective adaptive measures to control their emotions or stress, such as: self-regulation in 83.5% of the sample elements, literature review in 26.4% of the sample elements and avoiding information in 22% of professionals. 75.8% of the teams actively expressed their psychological stress, compared to 24.2% who did not.

It was also verified that this change in the nurses' lives was a facilitator, due to the good housing conditions that some elements present. In families where everyone was infected, they were able to maintain their family dynamics.

CONCLUSIONS

This study allowed recognizing the perceptions of the experiences of contamination of nurses infected by SARS-COV-2, during confinement. The objective finds an answer in the discursive contents that build the first generation category "Changes in life (1.1)", from the second generation daughter categories "Difficulties/Disorders (1.1.1)" and "Adaptive Strategies (1.1.2)", and the subsequent categories of third and fourth generations.

The most evident difficulty or disturbance was at the emotional level, negative emotional states were notorious, such as: sadness (69.7%), fear (69.7%), anguish (63.6%), impotence face the situation (60.6%), revolt (48.5%), guilt (27.3%), anger (12.1%), misunderstanding on the part of others (6.1%), anxiety (6.1%) and loneliness (6.1%).

On a personal level, family and social isolation was the change most mentioned by nurses. The use of a mask, gloves, constant hand disinfection in the common areas of the house, airing the room, disinfection care in the spaces used, and the treatment of clothes and dishes separately were measures adopted to prevent contamination of the environment. family.

The role of the family was preponderant in this change of life. All support in terms of food, clothing and essential goods was provided by the family, which made "closer ties" with the various elements of the household. Concern for the children was a constant, since they also had to be in isolation.

At a professional level, the feeling of incapacity for not being able to help colleagues due to overwork and frustration for having left unfinished business was evident. The resumption of professional life had to be adjusted, due to the decrease in the physical and psychological capacities left by the infection. About 12.1% of nurses reported having had financial difficulties.

Interestingly, it was also found that 12.1% of nurses did not have difficulties, which means that the vast majority, around 88%, felt them.

The most frequent adaptive strategies were personal, biological, psychological and social strategies.

From a biological point of view, the following stand out: positive thinking, being patient, being resilient, adopting distraction measures, staying proactive, exercising, promoting socialization with others at a distance, trusting caregivers, resting and making a good nutrition.

For psychological adaptation, nurses resorted to reading, studying, watching television, listening to music, studying and attending classes, focusing on the good things, accepting the situation without guilt, adapting to the new situation and resorting to help. of health professionals such as psychologists and psychiatrists for psychological support.

With regard to socialization, nurses adopted some measures, giving high importance to distance communication with family and friends, from family dialogues to sharing feelings.

This study allowed a small contribution to recognize the realities experienced by nurses infected with SARS-COV-2, during the 2020 pandemic in Portugal, during confinement, so it can make a contribution to a better understanding of the quality of care. The complex contextualization of the phenomenon makes it pertinent to propose new studies on this reality lived alone.

REFERENCES

Coutinho, Clara Pereira. 2019. Metodologia de Investigação em Ciências Sociais e Humanas: Teoria e Prática. 2a edição. Almedina.

DGS. 2020. «CIRCULAR INFORMATIVA 14/2020, COVID-19 - Certificados de Incapacidade Temporária por Doença Profissional».

Fairclough, Norman, e Iran Ferreira de Melo. 2012. «Análise Crítica do Discurso como método em pesquisa social científica». Linha D'Água 25(2):307–29. doi: 10.11606/issn.2236-4242.v25i2p307-329.

INTERNATIONAL COUNCIL OF NURSES. 2020. «Protecting nurses from COVID-19 a top priority: A survey of ICN's national nursing associations».

Jin, Ying-Hui, Qiao Huang, Yun-Yun Wang, Xian-Tao Zeng, Li-Sha Luo, Zhen-Yu Pan, Yu-Feng Yuan, Zhi-Min Chen, Zhen-Shun Cheng, Xing Huang, Na Wang, Bing-Hui Li, Hao Zi, Ming-Juan Zhao, Lin-Lu Ma, Tong Deng, Ying Wang, e Xing-Huan Wang. 2020. «Perceived infection transmission routes, infection control practices, psychosocial changes, and management of COVID-19 infected healthcare workers in a tertiary acute care hospital in Wuhan: a cross-sectional survey». Military Medical Research 7(1):24. doi: 10.1186/s40779-020-00254-8.

Patients infected with COVID-19 in Wuhan, China». Psychiatry Research 292:113297. doi: 10.1016/j.psychres.2020.113297.

Onuma, Fernanda Mitsue Soares. 2020. «Contribuição da análise crítica do discurso em Norman Fairclough para além de seu uso como método: novo olhar sobre as organizações». Organizações & Sociedade 27(94):585–607. doi: 10.1590/1984-9270949.

Paula, Ana Claudia Ramos De, Aline Graziela Deneka Carletto, Daniele Lopes, Joabe Candido Ferreira, Nelsi Salete Tonini, Sara Priscila Carvalho Trecossi, Ana Claudia Ramos De Paula, Aline Graziela Deneka Carletto, Daniele Lopes, Joabe Candido Ferreira, Nelsi Salete Tonini, e Sara Priscila Carvalho Trecossi. 2021. «Reações e sentimentos dos profissionais de saúde no cuidado de pacientes hospitalizados com suspeita covid-19». Revista Gaúcha de Enfermagem 42(SPE). doi: 10.1590/1983-1447.2021.20200160.

Ribeiro, José Luis Pais. 2010. «Investigação e avaliação em psicologia e saúde». Obtido 30 de Março de 2021 (https://online.fliphtml5.com/pollw/ryib/#p=1).

Ribeiro, José Luis Pais. 2010. Metedologias de Investigação em Psicologia e Saúde. 3a edição. Legis Editora.

Xiang, Yu-Tao, Yuan Yang, Wen Li, Ling Zhang, Qinge Zhang, Teris Cheung, e Chee H. Ng. 2020. «Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed». The Lancet. Psychiatry 7(3):228–29. doi: 10.1016/S2215-0366(20)30046-8.

WHO. 2020. «Transmission of SARS-CoV-2: implications for infection prevention precautions». Obtido 21 de Abril de 2021 (https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions).