Original Article

Nursing work during the COVID-19 pandemic: (dis)satisfaction and (de) motivation

Trabalho da enfermagem na pandemia da COVID-19: (in)satisfação e (des)motivação

Letícia de Assis Santos[1]
Allana de Lacerda Uzeda[1]
Luana Ramos Garcia[2]
Maithê de Carvalho e Lemos Goulart[1]
Fernanda Garcia Bezerra Góes[1]
Janaina Luiza dos Santos[1]

[1]Universidade Federal Fluminense.
Rio das Ostras, RJ, Brazil.
[2]Universidade do Estado do Rio de Janeiro.
Rio de Janeiro, RJ, Brazil.

Corresponding author:
Letícia de Assis Santos
Rua Recife, s/n, Q.6, L.9/10, Jardim Bela Vista
CEP: 28895-532. Rio das Ostras, RJ, Brazil.
E-mail: leticiaassis@id.uff.br

Conflict of interest: the authors have declared that there is no conflict of interest.

ABSTRACT

Objective: to show the factors that lead to (dis)satisfaction and (de)motivation in the work of nursing professionals in the COVID-19 pandemic. **Methods:** qualitative study, developed virtually, with professionals from nursing teams. Data was processed using the software *Interface de R pour Analyses Multidimensionnelles de Textes et de Questionnaires* and analyzed according to Thematic Analysis. **Results:** 72 workers participated. 45 (62.5%) stated to be satisfied and 46 (63.9%) to be motivated for work. The text segments were separated into four classes, each showing a factor that interfered in work (dis)satisfaction and (de)motivation. **Conclusion:** factors that intervene in satisfaction and motivation were mostly associated with patient recovery and helping one another. Among the factors that impacted on dissatisfaction and demotivation, the lack of needed supplies and work overload stood out. **Contributions to practice:** we identified needs and strategies relevant to improve the work environment.

Descriptors: Nursing; Job Satisfaction; Motivation; Pandemics; Occupational Health.

RESUMO

Objetivo: desvelar os fatores intervenientes para a (in)satisfação e a (des)motivação no trabalho dos profissionais de enfermagem na pandemia da COVID-19. **Métodos:** estudo qualitativo, desenvolvido virtualmente, com profissionais integrantes da equipe de enfermagem. Os dados foram processados no *Interface de R pour Analyses Multidimensionnelles de Textes et de Questionnaires* e analisados de acordo com a Análise Temática. **Resultados:** participaram 72 profissionais, 45 (62,5%) apontaram estarem satisfeitos e 46 (63,9%) motivados para o trabalho. Obtiveram-se quatro classes de segmentos de textos que evidenciam fatores intervenientes para a (in)satisfação e a (des)motivação no trabalho. **Conclusão:** os fatores intervenientes à satisfação e à motivação foram, principalmente, a recuperação do paciente e a ajuda ao próximo. Dentre os fatores intervenientes à insatisfação e à desmotivação, destacaram-se a falta de recursos e insumos e a sobrecarga de trabalho. **Contribuições para prática:** identificação de necessidades e estratégias de superação para melhorias no ambiente de trabalho.

Descritores: Enfermagem; Satisfação no Emprego; Motivação; Pandemias; Saúde Ocupacional.

Introduction

Health workers in the front lines of the struggle against the COVID-19 pandemic were exposed daily to the risk of infection. They were labeled as heroes, as such an essential work for the population was recognized. This exposure had an effect on their mental health, since the imaginary created by the population is not in line with the fear and insecurity regarding the possibility of transmission, losses caused by the disease, and anxiety with the end of the pandemic[1].

These aspects, associated with the collapse of the health system and lack of appropriate work conditions, directly prejudiced the health of nursing workers, who have been dealing with the dismantling of the public health system. Furthermore, the increase in the number of deaths, the sudden worsening of clinical states, and the negative prognostics, contribute to work dissatisfaction and demotivation in carrying out one's role[2].

In different contexts during the pandemic, factors could be observed such as the lack and low quality of personal protective equipment (PPE), the lack of training to deal with the pandemic, issues with the physical structure provided, in addition to lack of professional and financial recognition. These aspects are the potential causes of dissatisfaction and demotivation at work for nursing workers in the front lines[3-5].

Work satisfaction can be understood as stemming from a state of wellbeing, accomplishment, happiness in the work environment, in addition to a reaction determined by several psychological, social, and economic factors[6]. Work motivation is conceived as an internal determinant that emerges from a need, corresponding to that which encourages the subject to act[7].

The (dis)satisfaction of workers will lead to consequences which, in turn, will interfere in their personal and family lives, as well as in their health-disease process. It will also have implications for the institution, interfering in their professional performance, the quality of care provided to users, and in

the interpersonal relations in the work environment. Frequently, the dissatisfaction and demotivation of workers is associated with distress, anxiety, difficulties in managing work, and situations where the mental and physical aspects are not adapted to each other[8].

Nursing workers faced several adversities in the period of COVID-19, such as emotional issues, lack of supplies and protocols; nonetheless, they kept on working in patient care[9]. Therefore, it is essential to discover factors that affect the (dis)satisfaction and (de)motivation at work during a pandemic.

Therefore, we aimed to understand, with the help of professionals themselves, what keeps nursing workers motivated for work during crises. We also attempted to determine reasons for demotivation and where is the source of satisfaction or dissatisfaction at work, in such a situation riddled with adversity. Therefore, we asked: What factors contribute to the work (dis)satisfaction and (de)motivation of nursing professionals in the context of the COVID-19 pandemic? Therefore, this study aimed to show the factors that lead to (dis)satisfaction and (de)motivation in the work of nursing professionals in the COVID-19 pandemic.

Methods

Qualitative study, developed in a virtual environment according with criteria determined in the Consolidated Criteria for Reporting Qualitative Research (COREQ). The participants were 72 nursing professionals who worked in the front lines of the struggle against COVID-19 during the pandemic in Brazil. 42 were nursing technicians, 29 were nurses, and one was a nursing auxiliary. We considered as inclusion criteria: being a nurse, nursing technician, or nursing auxiliary, working in the frontlines of the struggle against COVID-19 in the state of Rio de Janeiro. We excluded nursing workers under 18 years old and/or who were only responsible for managerial tasks.

Data collection took place from October to De-

cember 2021, using an electronic form. Sample was by convenience, using the Snowball technique[10]. The researchers sent an invitation with the link of the study to their relationship network (seeds); it was indistinctly sent to nursing workers from many institutions in all levels of health care (primary, secondary, and tertiary), via WhatsApp, Instagram, and Facebook. These workers, after answering the form, sent it to others. This was repeated until data collection was finished.

The filter questions that form the inclusion and exclusion criteria directed the participant to the end of the form, when there was no adequate to the criteria selected. It is noteworthy that the participants themselves stated whether they attended people with COVID-19 in the state of Rio de Janeiro, considering that this is an online study with the snowball technique. 76 nursing workers accepted to participate in the study. However, 4 were excluded due to the fact they did not work in direct care to COVID-19 patients, judging by the responses provided in the form.

We elaborated a semistructured form, converted into an online form using Google Forms. It included questions regarding sociodemographic and professional characterization, and the satisfaction and motivation at nursing work in the context of the pandemic. It was adapted from a previous research, carried out before the COVID-19 pandemic[11]. There was no need for a pilot test, and, during data collection, it was not necessary to change any questions, since the answers were sufficient to attend to the goals of the study.

The first part of the instrument counted on characterization data from the participants, including: age, sex, educational level, family income, professional category, time since graduation, work location according with level of assistance, whether the participant work in a public or private institution, and sector in which they work. The second part included questions regarding (dis)satisfaction and (de)motivation at work: 1) Do you feel satisfied at work; What gives you satisfaction at work in this pandemic context?; 3) What, for you, generates dissatisfaction at work in this pandemic context?; 4) Do you feel motivated

at work?; 5) What grade would you give your motivation at work?; 6) What keeps you motivated at work during the COVID-19 pandemic?; 7) What factors decrease your motivation for work during the COVID-19 pandemic?

Data was collected until theoretical saturation was reached. The responses of participants were read attentively in order to find repetitions, and, when no new information could be registered, no further responses were received in the forms[12]. All forms were analyzed. Saturation was reached after 72 forms considering the short and objective answers. The number of participants had to be increased so the factors investigated could be studied in depth, as well as to guarantee that we could take advantage of the textual corpus in the software used to process textual data.

Data regarding participant characterization was analyzed in the software SPSS, version 20.0, through descriptive statistics and central tendency measures (mean and median), as well as dispersion measures (standard deviation). The text *corpus*, originating from the answers to questions about (dis) satisfaction and (de)motivation at work, was processed by the software *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* (IRaMuTeQ). In addition, the *corpus* was prepared for analysis through the elimination of errors in typing, punctuation, and orthography. We also guarantee that the acronyms used were always the same, so we could analyze content free from language[13]. For lexicographic analysis, we considered the following terms as actives forms: nouns, adjectives, adverbs, verbs, and unrecognized forms. The other analysis items were considered to be supplementary[14].

We used the following methods to process data: word clouds, to visually organize terms according with their frequency by placing the most frequent ones closer to the center in a larger font; descending hierarchical classification (DHC), which groups terms in classes starting from the value of ≥3.84 e $p<0.05$ in the chi--squared test, indicating a strong association of each word with its respective class; and correspondence

factor analysis (CFA), which allows for an analysis of the texts produced according with the DHC classes and the frequency and value of the Chi-squared value of each word in the text *corpus* in a cartesian coordinate system[13-14].

Qualitative data processed were analyzed following a thematic analysis[15], according with the central meaning of the text segments. The content of the answers was organized via interpretation and inference proposals, articulating the findings and the conceptual milestones of the research. The participants were identified using the letters E, TE, and AE, the initial letters of the Brazilian Portuguese words for nurse, nursing technician, and nursing auxiliary, respectively. The letters were followed by a number with the order in which the person responded to the form.

The research was approved by the Research Ethics Committee from the Human Sciences Department of the *Universidade Federal Fluminense*, under opinion 4,995,755/2021.

Results

66 participants (91.7%) were female and 6 (8.3%) were male, with a mean age of 36.9 years (standard deviation [SD] 9.2; minimum: 20; maximum: 55). Regarding educational level, 34 (47.2%) had complete high school/technical education, 20 (27.8%) had higher education, 15 (20.8%) had specializations, 2 (2.8%) were MS, and 1 (1.4%) a PhD.

The family income of 53 participants (73.6%) was from one to three minimum wages, while 10 (13.9%) earned from four to six, and 9 (12.5%) earned more than six minimum wages. 60 workers (83.3%) worked in public institution, while the others worked in private ones. Regarding the level of care of institutions, 28 (38.9%) worked in a tertiary level institution, a hospital; 28 (38.9%) worked in a hospital of secondary level of care; and 22 (30.6%) worked in primary care. Regarding the sectors where the participants worked, 15 (20.8%) worked in the Intensive Care Unit; the same number of participants worked

in nursing wards dedicated to the direct care of COVID-19 patients. We did not investigate whether the participants worked in more than one institution that attended COVID-19 patients.

46 (63.9%) participants reported feeling motivated and 45 (62.5%) to be satisfied with their work. When asked what grade they would give to their work motivation on a scale from 0 to 10, the mean answer was 6.8 (SD=2.5; minimum = 0; maximum = 10; median = 8). In the word cloud, the words that allowed identifying (dis)satisfaction and (de)motivation, due to the fact they were the most common, were: lack (f=63), patient (f=56),not (f=37), help (f=22), salary (f=18), recognition (f=15), team (f=14), recovery (f=13), supply (f=12), and life (f=12) (Figure 1).

Figure 1 – Wordcloud regarding the frequency of words regarding factors associated with motivation, demotivation, satisfaction, and dissatisfaction in the work of nursing professionals in the COVID-19 pandemic. Rio das Ostras, RJ, Brazil, 2022

The initial identification of the most common terms in the *corpus*, which appear larger and closer to the center of the image, allowed mapping the factors related to the study object in the responses of the participants. Considering the word cloud revealed that, in the work of the nursing team, the patient is on the spotlight and directly interferes on these workers'

perception of work. The presence of this word has often been related to reasons for satisfaction and motivation, especially when they see the improvement of the clinicals state of the patients during nursing care: *Seeing the patients recover, since many of them couldn't. Every day when I get to work, I know there are lives there who need me and my team to help them bathe, take medications, eat, etc.* (TE17)*. Knowing that, as hard as it is to see the work conditions, we are thankful when we see that the patient is leaving well and thanking us for the good care* (TE 09).

Still in regard to the word cloud, another central element is the term "lack", which was related to the scarcity or even lack of different elements at work, such as physical and material resources, an issue made worse during the pandemic. The word "no" was also often repeated in the segments, related to the absence of certain elements in the service. One example is the lack of resources, in addition to the lack of professional valorization and adequate pay. Both words ("lack" and "no") were related with work dissatisfaction and demotivation: *The lack of empathy of people, the lack of resources, the lack of public investments to contribute for the earliest possible end* (E18). *Knowing that, as hard as work conditions may be, we have gratitude* (TE 09). *Having no resources, this causes dissatisfaction* (TE 13).

The CHD analysis found 72 texts in the *corpus*, with 733 forms and 92 text segments. 69 segments were classified, from each 75.0% were useful. We found 585 motos, 505 active forms, and 104 active forms with a frequency ≥3. The CHD dendrogram was presented in four classes, and text segments were grouped whose terms were correlated and significant within each class. The CHD was divided in two axes. One axis refers to class 1, the most more representative of the *corpus*, which was associated with 29.0% of the text segments, in association with class 4, with 17.4%; the second axis included class 2, with 27.5%, associated with class 3, with 26.1% (Figure 2). This allowed specifying the factors that intervened in the (dis)satisfaction and (de)motivation at work of nursing workers in the pandemic of COVID-19.
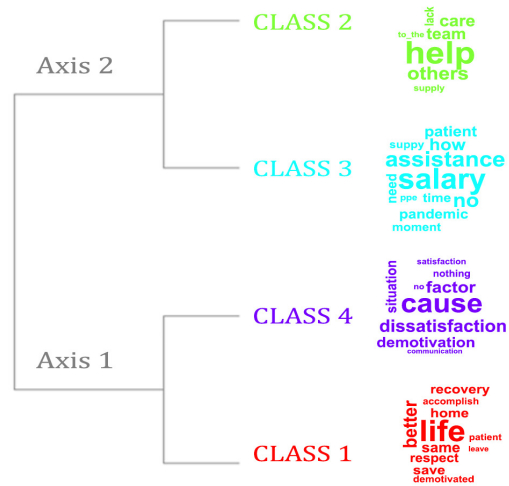

Figure 2 – Dendrogram of the descending hierarchical classification of the *corpus* regarding factors associated with motivation, demotivation, satisfaction, and dissatisfaction in the work of nursing professionals in the COVID-19 pandemic. Rio das Ostras, RJ, Brazil, 2022

Axis 1 – Institutional factors and patient condition as intervening factors

In class 1, the most relevant word was "life" (p<0.0001), followed by the words "better" and "home" (p<0.0001). The statements of participants show that the factors that contribute for satisfaction and motivation at work, in the context of the COVID-19 pandemic, were related with the fact that workers contribute to save the lives of patients. Thus, these workers seek to provide the best care possible to these individuals, treating them with care and respect and expecting they will get better and go back home. This is in spite of many difficulties at work, which include a lack of professional recognition and valorization: *Even though it's hard, to be able to do the best for my patient and save a life. Making a difference in the life of the patient, regardless of the difficulties* (E25). *To be a professional and do my job with the client with love, care, and respect and hope that he will go home see his family* (TE04). *Recovering the patients, saving a life despite the hardship in the public service, despite the lack of valorization of health workers, saving a life is what motivates me* (TE25).

The answers were essentially connected with the recovery of the patient and the act of going home as important factors that motivate and raise satisfaction at work, despite the hardships at work. Therefore, it became clear that participants feel demotivated and dissatisfied with bad work conditions, which include the lack of resources and work overload, low pay, and lack of training for the teams to attend COVID-19 cases, in addition to the lack of appreciation for their work: *Seeing a patient discharged, even with the little resources and lack of appreciation of our work and the neglect from the government* (TE02). *Going back home and not being sick, despite the lack of work conditions in the public network, the excessive work, the low pay, and the bad work conditions* (E20)*. The feeling of accomplishment with few hospitalized patients, few deaths, workers occupying roles with no competence to do so, killing people out of neglect, inability, and lack of training* (E29).

In class 4, the words which were significantly associated were: (p<0,001) reason, dissatisfaction, and factor. In this class, the reports of some participants showed the lack of aspects that encouraged dissatisfaction and demotivation at work: *For me, no factor is a reason for demotivation* (TE29). *No factor is a reason for my dissatisfaction or demotivation at work* (E10). *There is no factor that demotivates me* (TE13).

Other text extracts show satisfaction and dissatisfaction, influenced by factors that were made worse by the pandemic. This includes, once again, the lack of appreciation for their work, professional neglect, and the lack of resources, in addition to the worsening state and death of patients: *The patient state gets worse too fast, this makes us feel dissatisfied, impotent, very sad, and the number of deaths when on duty really affected my psychological wellbeing* (E28). *The lack of appreciation makes me dissatisfied, the lack of love for others from some workers and the neglect with our class are factors of dissatisfaction* (TE28).

Axis 2 – Lack of improved structures during the pandemic and helping one another as intervenient factors

In class 2, the most significant words were (p<0.0001): care, help, others, lack, and supply. It was found that, even considering the chaotic moment involving the COVID-19 pandemic and the dissatisfaction and demotivation at work in this context, helping the other was an element for most of the text segments in this class. It was seen as a crucial reason for continuity, satisfaction, and motivation at work. Furthermore, according with participants, financial stability also contributes for work satisfaction: *Knowing that I could contribute in a setting with so many doubts and hardship, that I can help others despite the lack of resources, PPEs, supplies, and fair pay* (TE37). *Financial stability during this crisis, being close to work colleagues with whom we can share ideas and gain experiences* (E21). *In middle of the chaos, I managed to do my job, to help others, and, in the team, we helped one another, no one can leave this boat, as much as we wanted to in the beginning of the pandemic* (E38).

Still in this class, the nursing workers reiterated that several adverse conditions of their work environments are sources of dissatisfaction and demotivation. Thus, in addition to institutional problems, such as the lack of equipment and supplies, low pay and work overload, participants also mentioned, as intervening factors, the lack of training and responsibility of some members of the health team: *The lack of preparation of the multidisciplinary team and the lack of responsibility of some team members* (TE36). *We lack equipment, lack PPE, low dirty work bonuses, too much work for too many people, and little post-covid attention from the workers* (TE20). *In patient care, the lack of supplies and organization from the hospital management and leadership* (E16).

In class 3, the most relevant words (p<0.0001) were: pay, assistance, and information. In this class, answers indicated once more that intervening factors for the demotivation and dissatisfaction at work refer to hardship at work, including the low pay of nursing workers and the inadequate material and structural conditions in which the team has to carry out their activities, including the lack of supplies, PPEs, beds, and assistance, in addition to the long wait for vaccination and the lack of information, especially during the pandemic: *Not having adequate pay, the lack of supplies and others, the lack of PPEs, the delay in vaccination and the lack of some information* (TE23)*. It is impossible to be satisfied in the setting of a pandemic, the patients motivate me, but the lack of beds and primary*

assistance, the low pay, the lack of information given to the patient, and the lack of beds in some institutions do not (TE35)*. The fact that the COVID nursing ward is not an adequate place to treat patients... not having a decent work to rest, everything is improvised* (TE22)*.*

The answers of the participants, in addition to the intervening factors mentioned about, includes the appreciation of nursing work as an element that affects satisfaction and motivation at work: *The lack of appreciation which doesn't always come from one's salary* (E09)*. The pay is low, but it's not late... The omission of our leaders during the crisis, seeing the neglect from our leaders* (TE03)*. The lack of appreciation from our work as professionals considering the competent authorities, the lack of appreciation* (TE05)*.*
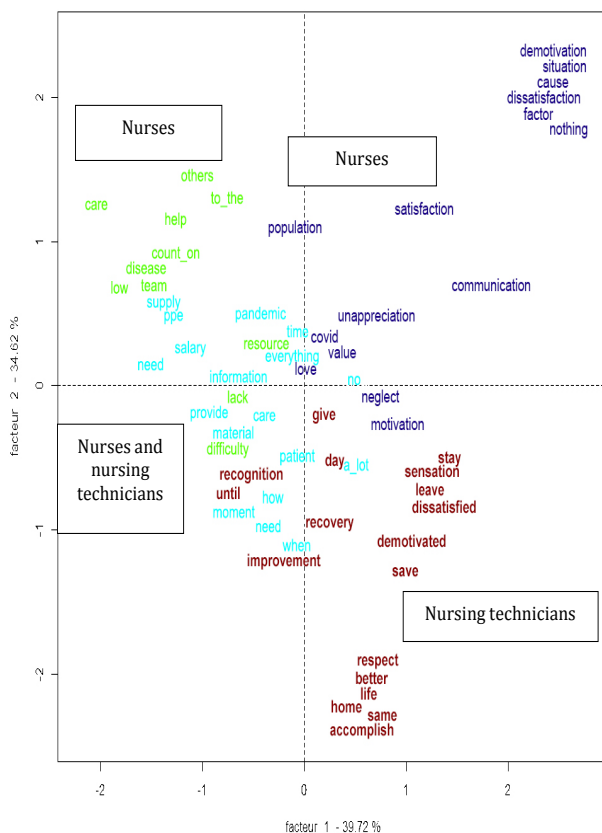
Figure 3 – Correspondence factor analysis of the *corpus* regarding factors associated with motivation, demotivation, satisfaction, and dissatisfaction in the work of nursing professionals. Rio das Ostras, RJ, Brazil, 2022

Using the CFA (Figure 3), we compared the differences in the use of words among professional categories, by superposing two cartesian planes where most relevant words for each class and professional categories are distributed, indicating whose answers included the words presented more often. Nurses used more often the words "help", "care", "others", "population", and "satisfaction", while nursing technicians mentioned more the words "respect", "home", "accomplish", and "life".

The CFA resulted in two factors (axes x and y) which, together, explained 74.3% of the model. The graphical distribution of the arguments of nursing workers in the axes x and y distinguishes the *corpus* in three lexical worlds. The first world, formed by the axes positive Y, positive X, and negative X (upper right and left quadrants) was formed by the responses of nurses. The second world, including positive X and negative Y axes (lower right quadrant) represents the answers of the nursing technicians. The third world, mostly comprised by negative X and Y axes, can be understood as the intersection between the answers of nurses and nursing technicians.

Considering this analysis, it became clear that, for nurses, the main source of work satisfaction is the feeling of caring and helping others (first lexical world). On the other hand, the answers of nursing technicians were related to the need for respect to their professional category and their duty to save lives and help patients go back home (second lexical world). Both categories often mentioned low pay and lack of supplies as intervening factors associated with dissatisfaction. These aspects were similar for both these workers (third lexical world).

Discussion

This research showed that most participants feel motivated and satisfied at work, and that the this pleasure is related to caring for others in a humane way. This finding corroborates a study carried out

with nursing workers in a hospital in Fortaleza, in which it was possible to verify the relationship between feelings of motivation when participating in the nursing team and offering care to the patient[16].

It also became clear that the very nature of nursing work stimulates the workers. To care, to see the patient getting better and to save lives increase their satisfaction and motivation at work. In another study, nursing workers highlighted that motivation for assistance includes, as one of its factors, the qualified and responsible use of abilities and knowledge, seeking the recovery of the patient and having a direct impact on their recovery and on the improvement, maintenance, and promotion of health of the individuals[16]. This is in accordance with current findings.

The COVID-19 pandemic changed the setting of health in which these professionals worked, especially in case of nursing workers, when it comes to health care challenges. Furthermore, caring for patients daily in this situation that, even from a clinical and therapeutic standpoint, is uncertain, generated insecurity and fear. However, despite the chaotic repercussions, related with a larger demand for health care, patient care has been guaranteed by the nursing teams who work in the frontlines[17]. Thus, certain factors offer a feeling of wellbeing and pleasure at work, for example, when workers feel motivated and satisfied starting with the moment they relief the pain and suffering of their patients[18], as this research shows.

Therefore, work satisfaction is related to a set of emotional aspects, and, as the activities carried out express pleasant feelings, the willingness to provide qualified care increases[19]. This justifies the satisfaction and motivation for work of nursing workers in the frontlines of the struggle against COVID-19 who participated in this research. On the other hand, it is worth considering that a factor mentioned by the workers has a negative impact on satisfaction and demotivation, namely, the worsening of the clinical status that often afflicts patients infected with COVID-19.

Thus, the role of the nursing team as they face the pandemic is extremely important, and the answers of participants indicate continuous nursing care as something whose goals is helping others and saving lives, a source of motivation and satisfaction, despite all adversities experienced in the pandemic. Nonetheless, literature leads to reflection and shows the need for providing care and assistance to these workers, raising a question: who is or will care for the nursing team? This is because repercussions of nursing work during the pandemic on the physical and psychological health of these workers cannot be measured in the long term[20].

In this line of thought, a Portuguese study also pointed out that the recurring concern of nursing workers in providing quality care is essential, but they must feel supported and satisfied by adequate management, leadership, and a team spirit, all of which need to create favorable work conditions and, consequently, reduce physical tiredness and psychological stress, strengthening the resilience of those who will have to remain in the frontlines[21]. An investigation carried out in the Philippines suggests that organizational measures are essential to give support to the mental health of nursing workers and help them deal with their fears, especially by receiving social support and support from their peers, in addition to psychological and mental support services and adequate training, in addition to precise information and regular updating of knowledge[22].

Among the findings, we also considered factors associated with labor conditions which directly intervene in the perception of dissatisfaction and demotivation at work. Thus, previously mentioned aspects, related to bad work conditions in nursing, which were made even worse during the pandemic, intervene in the dissatisfaction and motivation at work. These include lack of appreciation, supplies, and materials, low pay, bad conditions to provide care for the patients, and others. Similarly, the many factors that generate dissatisfaction and demotivation, often influenced by work conditions, management shortcomings, and relationship problems that permeate health work, were also observed in a Brazilian research carried out with nursing workers of a university hospital[18].

Low pay among participants, most of who earned only up to three minimum wages, and poor work conditions were found to be crucial factors that leave the professional feeling demotivated and dissatisfied with their work, according to participants. However, low pay among workers may be explain by the fact that most of them were nursing technicians and had only high school/technical education, a result similar to that of other Brazilian studies that addressed the topic in nursing professionals[16,18]. These findings are in accordance with those from a research carried out to determine the meaning of work for nursing workers, where 70% of workers were nursing technicians, while 65% had, at least, two jobs. The statements indicated that paid work means one's survival, showing a common concern among workers in this category[23].

It should be noted that the same factors have been pointed out in literature prior to the COVID-19 pandemic, which merely increased their relevance. This can be seen in another study carried out in a Brazilian university hospital which showed that the main thematic categories for work dissatisfaction were structure, pay, work journeys, work overload, and shortcomings of work instruments[8]. Similarly, an Iranian study suggested that the perception of nurses about the support received from organizations was positively connected to their satisfaction at work during the COVID-19. This reduces turnover intentions in the team as it increases their motivation[24].

In this context, a Turkish study found that nurses from emergency services who received motivational messages during the pandemic became significantly more satisfied at work, while those who did not receive these messages became less satisfied. These results suggest that motivation levels should be increased to promote high work satisfaction in health workers. This, according to a previous study[25], includes organizational support, professional commitment, and quality care, which is also in accordance with the results found here.

The intervening factors related with dissatisfaction and demotivation for the work we discovered were found to be intimately tied to work organization and the lack of workers in the nursing team, leading to work overload and physical and emotional exhaustion. We also found that the professionals want to solve the problems and satisfy the needs of patients. Nonetheless, when this is not possible, they tend to feel frustrated and impotent, as literature had shown[18]. Therefore, the involvement of the nurse in decision making not only makes it possible for them to manifest personal opinions, but increases their feeling of belonging to the institution, as well as mutual appreciation and teamwork. This has positive repercussions on work satisfaction and, consequently, on the improvement of health quality indicators[21].

We also found that intervening factors for (de)motivation and (dis)satisfaction with work are subjective and depend on the perception of each individual. Certain topics that emerged in the context of the COVID-19 pandemic also became clear and reflected directly on the perception of nursing workers regarding these issues. Therefore, organizational measures are essential to improve this setting of dissatisfaction and lack of motivation, results that point to an urgent need to improve the work conditions of nursing workers during and after the pandemic. Worldwide the elaborators of health politics must improve the current system of payments to these workers, providing them with an adequate field of work to improve the stability at work, starting with a systematic measurement and evaluation of satisfaction and motivation in the work environment, which would give support to a healthy and safe work environment[26].

It is also important to consider the mental health of nursing workers, who tend to have multiple jobs due to the low pay provided, in such a way that their health is compromised. Participants in this research mentioned their salary as a factor in their dissatisfaction, and thus, this element should be observed. After all, they usually undergo exhausting work journeys to improve their pay. This situation also directly implies in the care provided to the patients, which can compromise the quality of care and the quality of life at work[27].

Study limitations

This study had limitations associated with the pandemic setting, such as the territorial restriction selected for the study, which can have an influence, especially, in aspects related with the work conditions of participants, limiting the generalization of the results. Thus, we suggest that other studies should be carried out, in different contexts and using different methodological design, in order to broaden the knowledge on the topic.

Contributions to practice

This study contributed to identifying the intervening factors regarding the work (dis)satisfaction and (de)motivation of nursing teams during the COVID-19 pandemic. In this regard, we found gaps and shortcomings in the work environment, while also showing the urgent need for strategies to improve and show appreciation for these workers, which can also guide other assertive institutional measures to make work environments better and safer.

Conclusion

Factors that intervened in work satisfaction and motivation in nursing workers during the COVID-19 pandemic were the recovery, improvement, and discharge of patients under their care; the possibility of caring and helping others and saving lives; financial stability; and the ability to count on the professional responsibility and support of work colleagues.

Factors that intervened in lack of work satisfaction and motivation were related with the lack of many elements needed for work, including physical and material resources, such as equipment, supplies, PPEs, and beds; lack of adequate care; lack of professional recognition; lack of training and preparation in the teams; lack of responsibility of work colleagues; and lack of information about the pandemic. Partici-

pants also mentioned lack of professional appreciation, poor work conditions, work overload, delays in COVID-19 vaccination, fast worsening of patient situations, and the high number of deaths caused by the disease.

Authors' contribution

Concept and project or analysis and interpretation of data; writing of the manuscript or relevant critical revision of the intellectual content; final approval of the version to be published; and agreement to be responsible for all aspects of the manuscript: Santos LA, Goulart MCL.

Concept and project or analysis and interpretation of data; writing of the manuscript or relevant critical revision of the intellectual content; and final approval of the version to be published: Uzeda AL, Garcia LR, Góes FGB.

Writing of the manuscript or relevant critical revision of the intellectual content and final approval of the version to be published: Santos JL.

References

1. Teixeira CFS, Soares CM, Souza EA, Lisboa ES, Pinto ICM, Andrade LR, et al. The health of healthcare professionals coping with the Covid-19 pandemic. Ciênc Saúde Coletiva. 2020;25(9):3465-74. doi: http://10.1590/1413-81232020259.19562020

2. Souza NVDO, Carvalho EC, Soares SSS, Varella TCMYML, Pereira SRM, Andrade KBS. Nursing work in the COVID-19 pandemic and repercussions for workers' mental health. Rev Gaúcha Enferm. 2021;42(spe):e20200125. doi: https://doi.org/10.1590/1983-1447.2021.20200225

3. Gomes MP, Souza FBA, Tosoli AMG, Paula, GS, Espírito Santo CC. Impressões da equipe de enfermagem acerca da pandemia da COVID-19. Glob Acad Nurs. 2021;2(1):e66. doi: https://doi.org/10.5935/2675-5602.20200066

4. Aulanko I, Sanmark E, Oksanen L,Oksanen S, Lahdentausta L, Kivimaki A, et al. Working conditions during the COVID-19 pandemic in pri-

mary and tertiary healthcare: a comparative cross-sectional study. Int J Occup Med Environ Health. 2023;36(1):139-50. doi: https://dx.doi.org/10.13075/ijomeh.1896.01944

5. Delgado D, Quintana FW, Perez G, Liprandi AS, Ponte-Negretti C, Mendoza I, et al. Personal safety during the COVID-19 pandemic: realities and perspectives of healthcare workers in Latin America. Int J Environ Res Public Health. 2020;17(8):2798. doi: https://doi.org/10.3390/ijerph17082798

6. La Falce JL, Martins AP, Muylder CF, Pardini DJ. Satisfação no trabalho: estudo longitudinal em uma organização pública de ensino superior. Rev Gestão Tecnol [Internet]. 2020 [cited Mar 23, 2023];20(4):153-75. Available from: http://revistagt.fpl.emnuvens.com.br/get/article/view/1535/1172

7. Bichett M, Vargas SML. Fatores influenciadores na satisfação e motivação ao trabalho no setor público municipal. Desafio Online. 2021;9(1):138-62. doi: https://doi.org/10.55028/don.v9i1.10195

8. Scherer MDA, Soratto J, Trindade LL, Pires DEP, Brito LM. Satisfaction and dissatisfaction in the work of professionals at a university hospital. Saúde Debate. 2021;45(130):603-17. doi: https://doi.org/10.1590/0103-1104202113004

9. Góes FGB, Silva ACSS, Santos AST, Pereira-Ávila FMV, Silva LJ, Silva LF, Goulart MCL. Adversities experienced by nursing professionals in intensive care units in times of COVID-19. Rev Baiana Enferm. 2021;36:e45555. doi: https://doi.org/10.18471/rbe.v36.45555

10. Vinuto J. A amostragem em bola de neve na pesquisa qualitativa: um debate aberto. Temáticas. 2014;22(44):203-20. doi: https://dx.doi.org/10.20396/tematicas.v22i44.10977

11. Lemos MC, Rennó CR, Passos JP. Satisfação no trabalho da Enfermagem em UTI. Rev Pesq Cuid Fundam Online [Internet]. 2012 [cited Mar. 13, 2023];4(4):2890-900. Available from: http://seer.unirio.br/index.php/cuidadofundamental/article/view/2179/pdf_630

12. Neves Dr, Nascimento RP, Felix Jr MS, Silva FA, Andrade ROB. Sentido e significado do trabalho: uma análise dos artigos publicados em periódicos associados à Scientific Periodicals Electronic Library. Cad EBAPE.BR. 2018;16(2):318-33. doi: http://dx.doi.org/10.1590/1679-395159388

13. Souza MAR, Wall ML, Thuler ACMC, Lowen IMV, Peres AM. The use of IRAMUTEQ software for data analysis in qualitative research. Rev Esc Enferm USP. 2018;52:e03353. doi: https://doi.org/10.1590/S1980-220X2017015003353

14. Góes FGB, Santos AST, Campos BL, Silva ACSS, Silva LF, França LCM. Use of IRAMUTEQ software in qualitative research: an experience report. Rev Enferm UFSM. 2021;11(63):1-21. doi: https://doi.org/10.5902/2179769264425

15. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. São Paulo: Hucitec; 2014.

16. Brandão MGSA, Lúcio KDL, Aguiar DV, Silva LA, Caetano JA, Barros. Fatores motivacionais no desempenho da equipe de enfermagem. Cult Cuid [Internet]. 2019 [cited Mar. 13, 2023];23(54):255-65. Available from: https://ciberindex.com/index.php/cc/article/view/54255cc

17. França PMB, Oliveira ARN, Silva GS, Silva ESAP, Lima PS, Silva AKF, et al. Nursing care during the Covid-19 pandemic. Braz J Develop. 2021;7(8):84871-84. doi: https://dx.doi.org/10.34117/bjdv7n8-613

18. Miorin JD, Camponogara S, Pinno C, Beck CLC, Costa V, Freitas EO. Pleasure and pain of nursing workers at a first aid service. Texto Contexto Enferm. 2018;27(2):e2350015. doi: https://doi.org/10.1590/0104-070720180002350015

19. Silva AMP, Santos BF, Pereira IL, Cassiano SAL, Alvim ALS. Factors associated to the motivation and dissatisfaction of the nursing team in health work. Rev Enferm UFPI. 2021;10:e951. doi: https://doi.org/10.26694/reufpi.v10i1.951

20. Souza LPS. Trabalhadores da enfermagem na pandemia da COVID-19 no Brasil: quem tem cuidado de quem cuida?. Bol Conjuntura. 2020;4(11):1-5. doi: https://doi.org/10.5281/zenodo.4158704%20%20

21. Ribeiro OMPL, Coimbra VMO, Pereira SCA, Faria ADCA, Teles PJFC, Rocha CGD. Impact of COVID-19 on the environments of professional nursing practice and nurses' job satisfaction. Int J Environ Res Public Health. 2022;19:16908. doi: https://doi.org/10.3390/ijerph192416908

22. Labrague LJ, Santos JAA. Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses. J Nurs

Manag. 2021;29(3):395-403. doi: https://dx.doi.org/10.1111/jonm.13168

23. Barboza PC, Pires AS, Pérez Júnior EF, Oliveira EB, Espírito Santo TB, Gallasch CH. The meaning of work: perspectives of nursing professionals who work in clinical units. Rev Rene. 2018;19.e32819:1-8. doi: https://doi.org/10.15253/2175-6783.20181932819

24. Sharif SP, She L, Liu L, Naghavi N, Lola GK, Nia HS, et al. Retaining nurses via organizational support and pay during COVID-19 pandemic: the moderating effect between intrinsic and extrinsic incentives. Nurs Open. 2023;10(1):123-34. doi: https://doi.org/10.1002/nop2.1286

25. Goktas S, Gezginci E, Kartal H. The effects of motivational messages sent to emergency nurses during the COVID-19 pandemic on job satisfaction, compassion fatigue, and communication skills: a randomized controlled trial. J Emerg Nurs. 2022;48(5):547-58. doi: https://dx.doi.org/10.1016/j.jen.2022.06.001

26. Diakos GE, Koupidis S, Dounias G. Measurement of job satisfaction among healthcare workers during the COVID-19 pandemic: a cross-sectional study. Med Int (Lond). 2022;3(1):2. doi: https://doi.org/10.3892/mi.2022.62

27. Cordeiro MG, Torres ARA, Rocha FAA, Costa FBC, Branco JG. Satisfação profissional de enfermeiros em uma unidade de emergência. Rev Nurs. 2019;22(249):2604-9. doi: https://dx.doi.org/10.36489/nursing.2019v22i249p2604-2609