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## Experience of ambulance drivers on transfer of suspected or confirmed patients for COVID-19

Vivência dos condutores de ambulância sobre transferência de pacientes suspeitos ou confirmados para COVID-19

Experiencia de los conductores de ambulancias en el traslado de pacientes sospechosos o confirmados a COVID-19

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### ABSTRACT

**Objective:** To unveil the experience of ambulance drivers regarding the transfer of suspected or confirmed patients for COVID-19.

**Method:** Exploratory study with a qualitative approach conducted in October 2021 with 18 drivers from the Northwestern Mesoregion of the State of Ceará-Brazil. The individual interviews occurred virtually, via Google Meet®, and for data processing the IRAMUTEQ® software was used.

**Results:** Six classes were obtained: Feelings experienced during transfers; Concern about contamination of the work team and family members; Therapeutic itinerary, patients' clinical status and increase in the number of transfers; Disinfection of ambulances between transfers

of patients with suspected and/or diagnosed COVID-19; Gowning for patient transfers and Psychospiritual aspects of drivers during the pandemic.

**Conclusion:** The experience was marked by challenges in adapting to the new routine and procedures during transfers. It was evidenced feelings of fear, insecurity, tension and anguish in the worker's reports.

**Keywords:** COVID-19. Noncommunicable diseases. Health personnel. Ambulances. Emergency medical services.

## RESUMO

**Objetivo:** Desvelar a vivência dos condutores de ambulância sobre transferência de pacientes suspeitos ou confirmados para COVID-19.

**Método:** Estudo exploratório com abordagem qualitativa realizado em outubro de 2021 com 18 condutores da Mesorregião Noroeste do Estado do Ceará-Brasil. As entrevistas individuais ocorreram de forma virtual, via *Google Meet*®, e, para processamento dos dados, foi utilizado o software IRAMUTEQ®.

**Resultados:** foram obtidas seis classes: Sentimentos vivenciados durante as transferências; Preocupação com a contaminação da equipe de trabalho e dos familiares; Itinerário terapêutico, quadro clínico dos pacientes e aumento na quantidade de transferências; Desinfecção das ambulâncias entre as transferências de pacientes com suspeita e/ou diagnóstico de COVID-19; Paramentação para as transferências de pacientes e Aspectos psicoespirituais dos condutores durante a pandemia.

**Conclusão:** A vivência foi marcada por desafios na adaptação à nova rotina e procedimentos durante as transferências. Foram evidenciados sentimentos de medo, insegurança, tensão e angústia nos relatos dos trabalhadores.

**Palavras-chave:** COVID-19. Doenças transmissíveis. Pessoal de saúde. Ambulâncias. Serviços médicos de emergência.

## RESUMEN

**Objetivo:** Desvelar la experiencia de los conductores de ambulancias sobre el traslado de pacientes sospechosos o confirmados a COVID-19.

**Método:** Estudio exploratorio con enfoque cualitativo realizado en octubre de 2021 con 18 conductores de la Mesorregión Noroeste del Estado de Ceará. Las entrevistas individuales se realizaron de forma virtual, a través de *Google Meet*®, y para el procesamiento de los datos se utilizó el software IRAMUTEQ®.

**Resultados:** Se obtuvieron seis clases: Sentimientos experimentados durante los traslados; Preocupación por la contaminación del equipo de trabajo y de los familiares; Itinerario terapéutico, estado clínico de los pacientes y aumento del número de traslados; Desinfección de las ambulancias entre los traslados de pacientes con sospecha y/o diagnóstico de COVID-19; Paramentación por los traslados de pacientes y Aspectos psicoespirituales de los conductores durante la pandemia.

**Conclusión:** La experiencia estuvo marcada por los retos de adaptación a la nueva rutina y procedimientos durante los traslados. En los informes de los trabajadores se evidenciaron sentimientos de miedo, inseguridad, tensión y angustia.

**Palabras clave:** COVID-19. Enfermedades no transmisibles. Personal de salud. Ambulancias. Servicios médicos de urgencia.

## INTRODUCTION

In the emerging and pandemic scenario of COVID-19, the emergence of new cases had exponential growth. In August 2021, Brazil stood out worldwide for being the third

country with the highest number of confirmed cases, surpassing the mark of 21 million individuals, behind only to the United States and India<sup>(1)</sup>.

Although most people affected have mild symptoms, this disease is associated with several complications that require hospitalizations for intensive care with structure, equipment and trained professionals to provide care according to its complexity<sup>(2)</sup>.

According to the World Health Organization (WHO), in 2020, 80% of patients diagnosed with COVID-19 had mild symptoms and no complications, with 15% requiring hospitalization in wards for respiratory support with oxygen therapy and 5 % needed to be treated in intensive care units<sup>(3)</sup>. However, such care was not available in all hospital units, making it necessary to transfer patients between hospitals to an institution capable of providing advanced care<sup>(4-5)</sup>.

In Brazil, according to Ordinance No. 1,010, of May 21, 2012, such transfers can be carried out through the mobile emergency service by Basic Life Support Units (vehicles with at least two professionals: driver and technician or nursing assistant) or through Advanced Life Support Units (vehicles with at least three professionals: emergency vehicle driver, nurse and physician)<sup>(6)</sup>.

In this scenario, Brazilian researchers identified that nurses from Paraná already reported weakness in the mobile urgent care service even before the pandemic, mainly due to the overload of activities, difficulties in relationships with hospitals, lack of vehicles and professionals<sup>(7)</sup>. In the pandemic context, it is inferred that changes in services routine have boosted the challenges already experienced, since workers in these services are in direct contact with infected patients, corroborating an increase in the possibility of transmission. Furthermore, they are exposed to develop the symptoms of fear, stress and anxiety.

Among the professionals responsible for the transfers, ambulance drivers stand out. This function is presented by Bill 3104/20 in 2020 as responsible for transporting patients in urgent and emergency situations. According to the text, the driver is exposed to the same biological risks as health professionals<sup>(8)</sup>, including biological contamination. However, studies developed at national and international level do not scientifically investigate the particularities related to drivers, since they mainly research the experience of nurses, nursing technicians and/or physicians<sup>(9-10)</sup>.

Given this scenario and the scarcity of research that addresses the experience of workers who transfer patients with suspicion or confirmed COVID-19, the following question arose: how is the experience of drivers responsible for the transfers of patients with suspected or confirmed COVID-19 in the Unified Health System (*Sistema Único de Saúde* - SUS)?

It is necessary to understand the reality experienced by drivers, who are also in pre-hospital care, as well as to identify subjective aspects such as feelings and experiences in the specific context of the pandemic. These workers' reports become an important source for understanding possible difficulties experienced, which can be considered for planning and implementation of labor interventions that are consistent with patient safety and occupational safety during transfers. Moreover, the content of interviews with drivers can contribute to implement effective disease prevention and health promotion strategies, focused on the main difficulties faced in daily life.

Given this scenario and the scarcity of research on the subject, this study aimed to unveil the experience of ambulance drivers regarding the transfer of suspected or confirmed patients for COVID-19.

## **METHOD**

This is an exploratory study with a qualitative approach, guided by the Consolidated criteria for reporting qualitative research (COREQ). The study was conducted in October 2021 with 18 drivers, linked to the SUS of the Northwestern Mesoregion of the State of Ceará-Brazil, which is composed of seven cities: (Sobral, Massapê, São Benedito, Ipu, Ibiapina, Santana do Acaraú and Graça).

The target audience was represented by workers of the transport, at hospital health services in the region. Participants were recruited using the snowball strategy. For this, contact was made with the coordination of hospital and pre-hospital services in the State of Ceará to obtain the contact details of the professionals. With the contact list, an invitation to participate in the study was sent via phone calls and/or text messages in the Whatsapp® application. After acceptance, the signing of the Free and Informed Consent Form was requested from a form on the Google® platform and the interview was scheduled.

The inclusion criteria were to be a professional ambulance driver member of the patient transport team, to have an employment bond with health institution and to have digital equipment with internet access to participate the research. Workers on leave during the collection period (health leave, maternity leave, or vacation) and who did not attend the video call after three scheduling attempts were excluded.

Data collection scenario was online through Google Meet® (<https://meet.google.com>) with individual interviews, mediated by a nurse researcher, nursing doctoral student and with two years of experience in mobile urgent care. Before the interviews, the researcher responsible for the interviews was trained with two doctors, professors of the Nursing course

at public educational institutions in the Northeast Brazil, experts in qualitative studies in order to simulate the moment of the interview and the strategies of data collection. It stands out that these three members of the research team had no bond with the health services participating in the data collection nor any other conflict of interest.

For the interview, a semi-structured questionnaire consisting of two parts was used: the first contained sociodemographic and labor information. The second was represented by the triggering question: “Talk about the transfers you made of patients with suspected or confirmed diagnosis for COVID-19”. The sample size was defined by theoretical saturation, that is, it was suspended the inclusion of new participants when the data showed redundancy or repetition<sup>(11)</sup>.

It should be highlighted that, on the scheduled day for the interview, the participant was not engaged in work activities. Thus, 24 hours before the scheduled time for the interview, the link to the online meeting on Google Meet® was sent via Whatsapp®. A delay of 15 minutes was allowed for each participant to attend the interview. Each online meeting lasted, on average, 30 minutes and, when the subject was exhausted during the conversation with the interviewee, it was signaled that the interview was ending and if he would like to add something to his speech. At the end of the meeting, the researcher thanked for their participation and contribution to the research.

The interviews were recorded using an MP4 voice recorder and fully transcribed in Microsoft Word®, with double checking of the transcribed content. Then, the data were returned to the participants for comments and/or correction with subsequent feedback on the statements. It is noteworthy that the transcription of the statements that made up the corpus of analysis was performed by the same researcher who conducted the interviews.

Data were analyzed using the *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* (IRAMUTEQ)® 0.7 Alfa 2.3.3.1 software. From anchoring to the R software, then fragmented the transcribed text into segments and words, to analyze them with multivariate lexicography by Descending Hierarchical Classification (DHC), in which the segments were grouped into classes, which are visually presented by IRAMUTEQ® in a dendrogram type illustration. To maintain anonymity, citations were identified by the letter I.

This study complied with the aspects of Resolution 466/2012 of the National Health Council (*Conselho Nacional de Saúde* - CNS) of the guidelines and Regulatory Norms for Research involving human beings of the Ministry of Health under approval of the Research Ethics Committee of the *Universidade da Integração Internacional da Lusofonia Afro-Brasileira* (UNILAB) under opinion 4,945,218 (CAAE 40261420,9,0000,9267). It is

highlighted that there was no conflict of interest during the interviews since there was no prior contact with the interviewees and they did not know the researcher responsible for data collection.

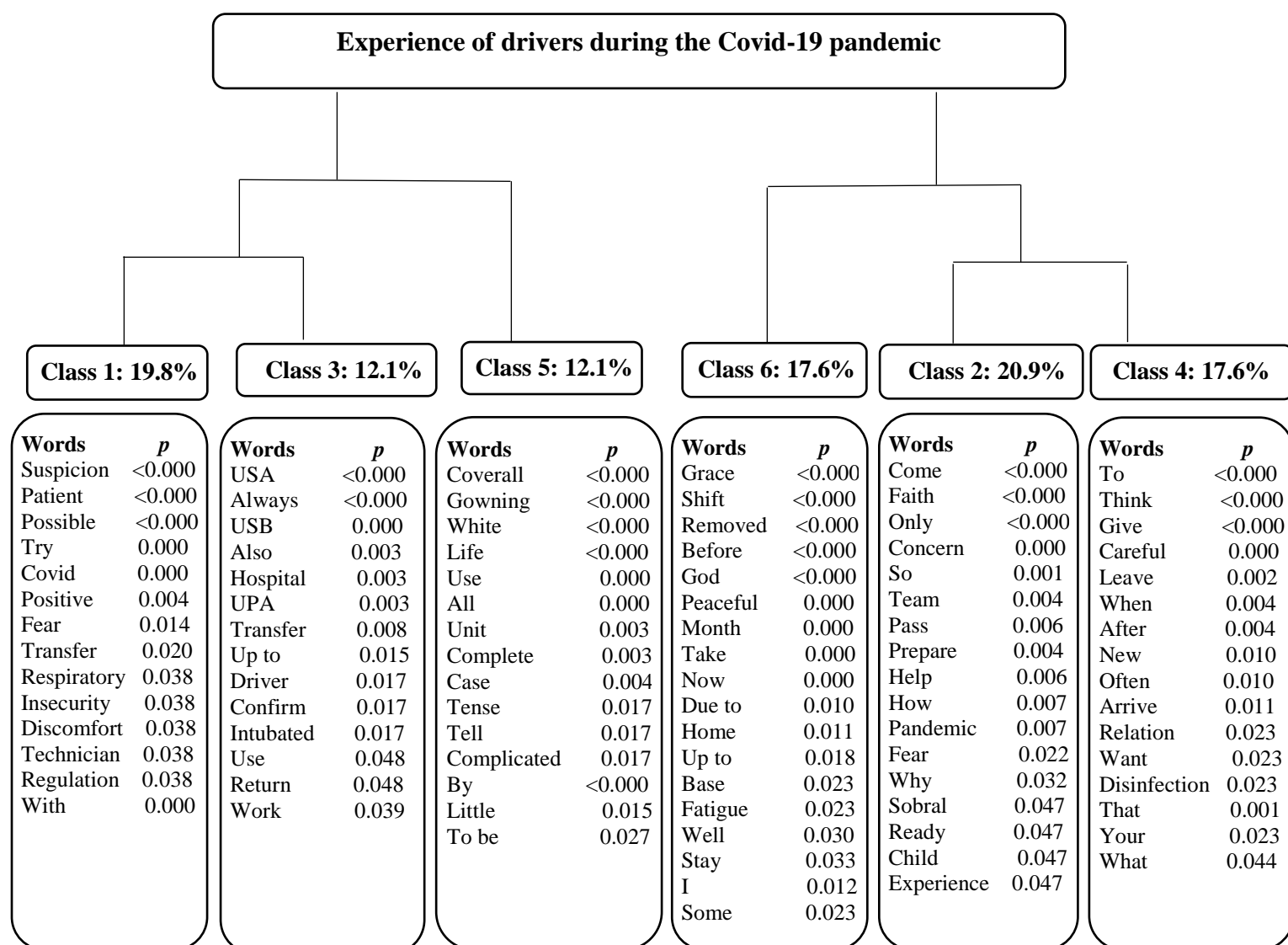
## RESULTS

From the 18 drivers that participated in the study, five were from Sobral (27.7%), five from Massapê (27.7%), four from São Benedito (22.2%) and one from the cities of Ipu (5.6%), Ibiapina (5.6%), Santana do Acaraú (5.6%) and Graça (5.6%), respectively. The majority (11 - 61.1%) worked in the transport of patients in hospital units and seven (38.9%) in the Mobile Emergency Care Service (*Serviço de Atendimento Móvel de Urgência - SAMU*).

All participants were male with a mean age of 40.9 years and mean time working in the services of 6.6 years. Regarding employment, 11 (61.1%) had full dedication and seven (38.9%) had a second employment. The participants' weekly workload was 44 ( $\pm 4.8$ ) hours at the health service through which they were being interviewed. The drivers reported that there was rotation in the work shift and between the basic and advanced support units. In addition, they reported that they did not remember the number of patients transferred during the months of February to October 2021.

The IRAMUTEQ® software set the text into 114 textual segments, 1067 shapes, 4156 occurrences, with 79.8% of the text. The dimensioning of the Elementary Context Units (ECU) divided the participants' statements into six classes, detailed in Figure 1.

**Figure 1** - Dendrogram of words allocated in six classes. Fortaleza, Ceará, Brazil, 2021



Source: Research data, 2021.

### Class 1 - Feelings experienced during transfers (19.8%)

Class 1 is the second class with the highest number of ECU (19.8%). This category revealed the discomfort of drivers during transfers of suspected and/or confirmed patients with COVID-19 due to feelings such as fear, insecurity, worry, tension, and anguish caused by the pandemic context:

*“When we are going to transfer positive patients and they come coughing inside the ambulance, involuntarily, despite the use of complete PPE, we get scared” (I2)*

*“We were scared about the transfers of patients with COVID-19, because many times we transfer patients only with respiratory distress with suspected COVID-19, but without a test.” (I4)*

*“It was a little scary because we were afraid of contamination.” (I4)*

*“At the beginning of the pandemic it was very difficult, without accurate information and with fear.” (I7)*

*“The transfers with patients suspected or positive of COVID-19 made by me and other colleagues were very scary. As a driver, I felt insecure and very afraid.” (I10)*

*“In transfers we work with fear and insecurity because we are with an invisible enemy.” (I12)*

*“During the transfers of patients with suspected or confirmed COVID-19, there was no way not to be afraid and insecure.” (I14)*

*“Different from any experience we've ever had, our team was surprised by a fear that we didn't know where it came from or how it came. We were already used to tense situations, but we had never been through the experience of COVID-19.” (I15)*

Feelings of fear and insecurity triggered by the uncertainties of the pandemic made some interviewees think about giving up their jobs. However, the statements indicated that the experience of the drivers was also marked by awareness and conviction of their importance in pre-hospital care:

*“We were scared and wanted to give up, but we couldn't give up.” (I2)*

*“My fear was big, and I couldn't give up, because I knew it was my job... Today my fear is bigger because I did some tests at my work, and I always tested negative, and I know I'm not free of this disease.” (I16)*

Moreover, the statements showed that despite the fear and desire to give up, the professionals showed empathy for patients suspected and/or diagnosed with COVID-19, so that the empowerment of solidarity helped the resilience of the drivers.

*“I try to understand the patients because I know how worrying this COVID-19 is for them. But this I use as an incentive to do even more for my patients. It's the fear and uncertainty about this virus.” (I9)*

*“Fear comes, but we know that only we, at that moment, can help that father, mother, child. I chose this driving profession to always do my best.” (I9)*

The drivers also reported the feeling of concern for the work team and family members, according to Class 2.

### **Class 2 - Concern about contamination of the work team and family members**

Class 2 had the highest number of ECU (20.9%). In this category, the concern of drivers about the contamination of the team and family members was observed, as being in pre-hospital care, such professionals could contaminate the work team and the family that was in social isolation at home.



*“I had to focus more on the issue of safety both for me as a driver and for my team.” (I1)*

*“I just came home worried. Every time I got home thinking I was infected, with that anxiety and worry about passing it on to someone else. Due to anxiety came that dyspnea of anxiety. I think psychologically I got COVID-19 about 15 times.” (I1)*

*“If we were infected at work, we would be taking this disease into home with the risk of infecting the family and more people.” (I12)*

The concern generated by the fear of transmitting the new coronavirus to the work team and family members made drivers adopt preventive measures during the pandemic context, as mentioned in the statements:

*“Double attention in the procedure so as not to have the risk of infection and even of infecting other people, especially our family members.” (I1)*

*“That anxiety and concern of passing it on to someone, so I isolated myself at home with the children. Avoiding too close contact.” (I2)*

*“Leaving the family is proving to be quite difficult... We must be very careful not to pass it on to them.” (I9)*

Moreover, drivers reported the clinical condition of patients diagnosed with COVID-19 and the increase in the number of services during the pandemic, according to Class 3.

### **Class 3 - Therapeutic itinerary, patients' clinical status and increase in the number of transfers**

In Class 3, it was observed that carrying out transfers of patients with COVID-19 from Emergency Care Units (UPA) to tertiary services became part of the routine of health professionals during the pandemic. As a result, new behaviors and protocols were implemented in basic and advanced support ambulances with a view to promote patient and professional safety and reduce the infection chain.

*“Transfers were always made from the UPA to field hospitals with a positive report. The patient underwent a quick test at the UPA, it was confirmed and awaited transfer to field hospitals.” (I2)*

*“We transfer these patients many times from the UPA to the hospital. While these patients did not have a confirmation of COVID-19, it was a patient transferred by the basic support unit, with a nurse technician and a driver.” (I4)*

*“We took these patients from the UPA to the hospital.” (I4)*

The professionals interviewed emphasized the clinical status of transferred patients and the need to know their prognosis. Most had dyspnea, fever, general malaise and the use of a nasal catheter. Basic support units carried more stable patients, while advanced support units carried more severe cases.

*“In the basic support units, most patients had mild dyspnea and were using a nasal catheter, with fever and general malaise. From what I saw in the advanced support unit, there were few occurrences.” (I2)*

*“It went from the UPA to the hospital. I transported stable patients in the basic support unit. In the advanced support unit they were stable as well.” (I3)*

*“The advanced support ambulance goes for critically ill patients who are intubated, it is a more complicated service than the basic one.” (I8)*

In addition to changes in protocols, during the pandemic, drivers reported a significant increase in the number of transfers, corroborating the reduction in rest times and meal times, in addition to an increase in team fatigue and exhaustion.

*“At the height of the pandemic we were doing six or seven transfers a night in each ambulance.” (I2)*

*“On my shift from 7:00 pm to 7:00 am, we did six to ten calls for patients with COVID-19. The team was exhausted. We arrived from a transfer and didn't have time to drink water or have a snack or meal.” (I5)*

In addition, in Class 4, drivers reported changes in work routine during transfers.

#### **Class 4 - Disinfection of ambulances between transfers of patients with suspected and/or diagnosed COVID-19**

In addition to changes in the routine of care, the results of the study showed in Class 4 the implementation of new care during the transfers of patients with suspected and/or diagnosed COVID-19. Among such precautions, decontamination of ambulances after each transfer stands out, which corroborates the early wear of vehicles due to the chemicals used in the cleaning process.

*“We have to go back to the headquarters to clean up and then proceed to the occurrence, because before the pandemic we could go from one occurrence to another.” (I2)*

*“Our new ambulances arrived, but all of them already have rust inside, because after every occurrence we had to spray them with hypochlorite, as it is an oxidative substance, it rusted the ambulances a lot inside.” (I2)*

*“We must return to headquarters for mandatory disinfection.” (I8)*

The implementation of gowning protocols also had an impact on the drivers' routine, according to statements of Class 5.

### **Class 5 - Gowning for patient transfers**

The statements analyzed in Class 5 evidenced the impact of the implementation of new techniques for gowning and undressing on the drivers' experience. The use of new personal protective equipment (coveralls, masks, shoe covers, gloves, face shield), the heat in the Northwest Mesoregion of Ceará and the need to keep the air conditioners off, caused physical discomfort in health professionals.

*“It was uncomfortable mainly because of the clothing, the coveralls, as it was very hot.” (I4)*

*“Gowning is a very important issue, as we are in front of patients and contaminated objects. The heat is terrible, because in addition to the coveralls, we used another robe that was PPE along with the mask and goggles. Anyway, it was a heavy and hot vestment.” (I5)*

*“But it's still a little stressful, a little tiring because we spent a long time in those coveralls. It's tiring. I felt very uncomfortable because of all the coveralls are very hot even with the air conditioning in the ambulance.” (I6)*

Despite the tiredness and fatigue, the use of personal protective equipment provided drivers a feeling of greater safety and reduced the fear of contamination. However, some municipalities did not have complete vestment, which corroborated the feeling of insecurity, according to the statements:

*“We only use disposables, cap, N95 mask and surgical mask over N95. We put on shoes to transfer patients.” (I3)*

*“In cases that were confirmed, we already wore the complete vestment with white coveralls. Thus, we had more safety during the transfer, as we were all dressed up.” (I4)*

*“Thus, the months passed, the difficulties and shortage of PPE made the journey much more complicated.” (I15)*

Finally, the drivers scored the personal means to overcome the insecurities arising from COVID-19, according to Class 6.

## **Class 6 - Psychospiritual aspects of drivers during the pandemic**

To overcome the fear and insecurity caused by the pandemic, Class 6 showed that the drivers sought in the psychospiritual aspects, means to reach help, hope and faith.

*“With faith in God, He helps us in everything.” (I1)*

*“Of course, it is not 100% safe to the point of not being afraid, but we have hope and faith, with the certainty that God is protecting us. First God protecting us. We take care of ourselves, we use PPE and we drive patients, asking God to solve everything. First of all, God, of course.” (I13)*

Study participants also demonstrated their psychospiritual aspects and their beliefs through gratitude to God for not having been infected or for having recovered after infection, according to the statements:

*“Thank God I'm leaving unharmed without having been infected.” (I1)*

*“Some drivers were infected but thank God they all got well.” (I4)*

*“Some were removed due to other comorbidities. Others are still on leave... My family and I took it, but God were with us.” (I5)*

*“I went many times to give first aid to patients at home and so far, thank God, all these patients are fine.” (I13)*

Such statements evidenced the presence of spirituality as a positive way in coping with the pandemic.

## **DISCUSSION**

The role of driver is not made official by law, so it is not yet considered a profession, however it is in the process of a Bill under number 3104/20<sup>(8)</sup> awaiting approval by the Brazilian legislature for its regulation. In this scenario, according to this project, ambulance drivers should not be considered as common drivers, since they are workers qualified to conduct emergency transport and, for this, they need specific knowledge related to the pathophysiology of patient transport, basic and advanced support life and dynamic of the place<sup>(8)</sup>. However, despite these functions, there is still a gap in the literature on the experience of this professional category, especially in the pandemic context.

The analysis of the experiences of the drivers was carried out in October 2021, after the peak in mortality caused by the Gamma and Delta variants. In this period, the mortality rate was 11,000 fatalities throughout the month, one of the lowest since April 2020, which recorded 82,000 deaths in the month<sup>(12)</sup>. Despite such reductions, the study showed the

presence of feelings of insecurity, concern, tension and anguish during transfers of suspected and/or confirmed patients with COVID-19. Corroborating these data, a qualitative study conducted in the United States, with 23 health professionals, including nurses and physicians, showed that, unlike other epidemics, unknowns of COVID-19 caused feelings of anxiety and stress in professionals<sup>(13)</sup>.

A systematic review with meta-analysis showed that the overall prevalence of anxiety in health professionals was 35% during the pandemic. There was a higher risk in women when compared to men, as well as in nurses compared to physicians. Working in pre-hospital care, being infected with the coronavirus, and having chronic diseases were factors associated with anxiety symptoms<sup>(14)</sup>.

To overcome the feelings of insecurity caused by the pandemic period, the drivers reported seeking support in the psychospiritual aspects to reach help, hope and faith. However, a quantitative study conducted in Portugal with health professionals identified that the role of religiosity regarding fear and anxiety in the context of a pandemic is limited, because, despite people with higher levels of hope and optimism had less anxiety, no protective factors were evidenced for the fear of COVID-19<sup>(15)</sup>.

Faced with this reality, it becomes necessary to seek strategies that corroborate to reduce the tension of workers. Chinese researchers concluded that integration of adequate psychological resources and social support are crucial to alleviate the symptoms of physical and mental stress of nurses who were in the pre-hospital care of the COVID-19 pandemic<sup>(16)</sup>. Thus, although such recommendations for drivers are scarce, the results of the present study showed the need to expand this psychological support, since drivers are also in the pre-hospital care team and suffer psychologically from the effects of the pandemic.

Study participants also reported fear and concern about contamination of the team and family members, leading to new preventive measures to be adopted routinely. The same was evidenced with health professionals in the United States, who chose to physically distance themselves from family members or leave the house completely<sup>(13)</sup>. With that, this reality might negatively affect interpersonal relationships between drivers, family members and friends.

In addition, the statements of the drives show that the routine of health services was changed, corroborating with an increase in the number of transfers, which favored an increase in stress, fatigue and exhaustion. This reality is in line with the statements of professionals from the Mobile Emergency Care Service (SAMU) in a capital in southern Brazil who reported an increase in the number of occurrences, mainly of a respiratory nature<sup>(17)</sup>.

Such data become worrisome, as scientific evidence shows that there is an association between Burnout Syndrome and not taking adequate breaks that allow rest and recovery among health service professionals during the COVID-19 pandemic<sup>(18)</sup>. Thus, the need to hire more workers for health services during the pandemic.

Despite the tiredness and fatigue caused by the implementation of new protocols related, mainly, to the decontamination of ambulances after transfers and the implementation of new techniques for gowning and undressing, the use of Personal Protective Equipment (PPE) provided a feeling of greater security for the drivers. The adoption of such measures was guided by technical note GVIMS/GGTES/ANVISA No. 04/2020, updated in September 2021, which indicates better ambulance ventilation, complete use of PPE, correct management of gowning and undressing, and cleaning the vehicle with alcohol 70%, sodium hypochlorite or another disinfectant<sup>(19)</sup>.

However, a shortage of supplies was reported in some services, which may corroborate the feeling of fear and insecurity. This reality is not restricted to the municipalities of Ceará, as a quantitative study conducted at national level identified that 69.3% of the participants reported the lack of PPE during the pandemic<sup>(20)</sup>.

In this scenario, researchers reinforce that the maintenance of PPE must be a state policy and managers must mobilize to obtain answers to this national challenge, with the need to encourage Brazilian industries, since most supplies are international, mainly from China<sup>(21)</sup>.

Unveiling the experience of drivers during the COVID-19 pandemic, based on the identified classes, contributed to understand the routine of these professionals, the new feelings that emerged during the pandemic and the main difficulties faced in handling transfers. Furthermore, the workers' statements became an important source for the implementation of new coping strategies for health promotion.

As limitations, we highlight the fact that the interviews were online, which may have interfered in the relationship between researcher and interviewee in conducting data collection. Another limitation is the fact that the study was conducted only with drivers linked to public services in Northeast Brazil and the data do not represent the reality of other Brazilian regions and private services.

## **FINAL CONSIDERATIONS**

The experience of drivers who transfer patients with suspected or confirmed COVID-19 was marked by feelings of fear, insecurity, tension and anguish. Professionals reported the

possibility of quitting their jobs due to concerns about infection of the work team and family members.

Moreover, it was identified through the statements of the drivers, that the routine of the health services was changed, corroborating the physical and mental stress, since there was an increase in the demand for transfers, which caused a reduction in rest times. Another stressing factor in the study was the change in the institution's protocols, mainly related to the decontamination of ambulances after each transfer and the implementation of new techniques for gowning and undressing in the experience of drivers, since the use of coveralls, masks, shoe covers, gloves and face shields, the heat in the Northwest Mesoregion of Ceará and the need to keep the air conditioners off, caused physical discomfort to workers.

The results of this study provide subsidies for health service managers to promote strategic interventions aiming at improving the occupational health of workers who work in patient transfers, as well as seeking to build flowcharts and protocols to be implemented in situations of health crises such as the COVID-19 pandemic.

It is suggested that new studies be conducted in other Brazilian states and with workers linked to the private system, aiming at identifying the experience of drivers who transfer patients with suspected or confirmed COVID-19 in other contexts.

In addition, the findings highlight the need to quantitatively investigate the presence of depression and anxiety in drivers, since feelings of fear, insecurity, tension, and anguish due to the pandemic were reported.

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