Calls for hiring nurses in times of coronavirus
Llamadas para contratación de enfermeros (as) en tiempos de coronavirus

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ABSTRACT:
Objective: To identify the profile of vacancies for nurses disseminated through social media during the COVID-19 pandemic.
Method: Quantitative, descriptive and exploratory document-based study based on Facebook, Instagram and Twitter publications through the use of hashtags: Facebook (#vacancies, #nursing and #employment #nurse), Instagram (#vacanciesnurse y and #vacancies) and on Twitter (#vacancies and #nurse), from March 01 to 22, 2021. Initially, 6,173 publications were found, of which 117 were selected after applying the inclusion and exclusion criteria and analysis.
Results: The predominant information in the publications was arranged in five categories, which were named with a hashtag: #nursespecialists, #minimumrequirements, #employment bond, #remuneration and #businessday. The Southeast was the region that most required specialists, followed by the Northeast and the South. Regarding the minimum requirements, 81.60% of the publications had requirements, among which professional experience and having a postgraduate degree were the most present. The most evident employment relationship was the effective contract. The salary range was between 4.1 and 5 minimum wages. And the weekly workload had the highest percentage in 24 hours and equal to or greater than 40 hours.
Conclusion: Knowing the scenario of hiring nurses in times of coronavirus shows an already announced trend, which is the shortage of qualified professionals to work in the labor market, in addition to the devaluing conditions that affect nursing work.

Key words: Labor market; Work conditions; Media; Nurses; Coronavirus infections

RESUMEN:
Objetivo: Identificar el perfil de las vacantes para enfermeras (os) divulgadas a través de las redes sociales durante la pandemia de COVID-19.
Método: Estudio cuantitativo, descriptivo y exploratorio, de base documental a partir de publicaciones de facebook, instagram y twitter a través del uso de hashtags: facebook (#vacantes #enfermería y #empleo #enfermero), instagram (#vagaenfermero y #vacantes) y en twitter (#vacante y #enfermero) del 1 al 22 de marzo de 2021. Inicialmente se encontraron 6.173 publicaciones de las cuales 117 fueron seleccionadas tras aplicación de los criterios de inclusión y exclusión y análisis.

Resultados: Las informaciones predominantes en las publicaciones fueron dispuestas en cinco categorías, que fueron nombradas con un hashtag: #enfermerospecialistas, #requisitosmínimos, #vínculolaboral, #remuneración y #jornadatrabajo. El Sudeste fue la región que más requirió especialistas, seguido del Nordeste y Sur. En cuanto a los requisitos mínimos, 81,60% de las publicaciones presentaron requisitos, entre estos la experiencia profesional y poseer posgrado fueron las más presentes. El vínculo laboral más evidente fue el contrato efectivo. El rango salarial estaba entre 4,1 y 5 salarios mínimos. Y la carga horaria semanal presentó el mayor porcentaje en 24 horas e igual o superior a 40 horas.

Conclusión: Conocer el escenario de contratación de enfermeros en tiempos de coronavirus, evidencia una tendencia ya anunciada, que es la escasez de profesionales calificados para la actuación en el mercado de trabajo, además de las condiciones devaluadoras que concierne el trabajo de enfermería.

Palabras clave: Mercado de trabajo; Condiciones de trabajo; Medios de comunicación; Enfermeros; Infecciones por Coronavirus.

INTRODUCTION

Preceded from the city of Wuhan, China, in December 2019, the new coronavirus, SARS-COV-2, spread rapidly around the world due to its high transmissibility, reaching 114 countries, and was declared a pandemic by the World Health Organization (WHO)(1). The first case of the disease in Brazil was announced in February 2020. Currently, there are more than 500,000 deaths in Brazil and 4.5 million in the world (2).

In this context, those infected by SARS-CoV-2 are classified as asymptomatic, who do not present symptoms, corresponding to approximately 30% of the population, and symptomatic who may present mild symptoms common to other types of viral infections, such as fever, headache, cough, myalgia, fatigue, diarrhea, vomiting and expectoration, loss of smell (anosmia) and taste (dysgeusia), present in 55% of the population, with the possibility of evolving with severe symptoms requiring hospitalization, corresponding to 10%, and critical symptoms such as pneumonia, acute respiratory distress syndrome, heart, liver and kidney dysfunction, in 5% of cases, requiring care in the Intensive Care Unit (ICU) or mechanical ventilation (3).

Given this scenario, the pandemic exposed the real situation of the health system, including the lack of nursing professionals to act in the care of these patients. Although nursing corresponds to the largest contingent of health workers and has 2.4 million professionals in Brazil, the deficit was evident, and these professionals are responsible for the first contact in access to health services, for improving access and quality of care (4,5).

In their day-to-day work, which is intensifying in the face of the COVID-19 pandemic, nurses are responsible for prevention measures, early detection and identification of suspected cases and continuous care of hospitalized patients, in addition to administrative activities, such as environmental actions, new staff dimensioning, leadership and team management (6,7).

The demand for professionals increased due to the characteristics of the pathology itself, thus, in the Intensive Care Unit area, there was a 50% increase in the number of
nurses, with the distribution of patients per professional from ten, before the pandemic, to five patients \(^{(8)}\).

Besides the previously announced need for nurses, another aggravating factor was the removal of professionals belonging to risk groups, such as professionals with chronic diseases (hypertension, diabetes, chronic obstructive disease, and asthma), smokers, people over 60 years old, pregnant women, immunosuppressed, and obese people, because they are the population with the highest risk of contamination by the virus \(^{(9)}\).

Thus, among the trends of the nursing labor market in the world, scarcity is observed, characterized as a complex phenomenon, involving the need for verification of professional experience and the insertion of nurses in search of this first experience, favoring the precariousness of jobs for nurses \(^{(10)}\).

Thus, the demand for qualified nursing professionals in various areas has increased, especially to work directly with critically ill patients, often using digital platforms as a means of dissemination and recruitment, including social networks due to the ease of access for the public. Thus, this study aims to identify the profile of vacancies for nurses advertised through social networks during the pandemic of COVID-19.

**MATERIAL AND METHOD**

This is an exploratory and descriptive study, document-based, with a quantitative approach. The exploratory-descriptive research aims to allow the deepening of knowledge in relation to a certain problem with a view to enabling the correlation of facts. The choice of a quantitative approach is justified by the fact that it encourages the characterization and quantification of the proposed objectives by means of measures presented from simple and/or complex statistical analyses \(^{(11)}\).

It is also noteworthy that the research was guided by Karl Marx's Labor Process theory, for the understanding of nursing work in the historical and social context in which it is inserted \(^{(12)}\), including the analysis of the composition of the workforce and trends in the labor market of nurses \(^{(13)}\).

As a data source, there are the social networks Instagram, Facebook and Twitter, being used the publications in the national scenario, about job openings for graduate level nurses, published in the period from March 01 to 22, 2021, period in which the number of cases of COVID-19 increased significantly in several regions of Brazil, requiring a greater number of nursing professionals to attend these patients.

The selection of publications was performed by crossing hashtags, modified according to each social medium, since each medium has peculiarities for searching these hashtags, and the choice was based on the crossing that presented the highest number of publications reached. As inclusion criteria, we selected the job offers for graduate level nurses in Brazil, published from March 1st to March 22nd, 2021. As exclusion criteria, the publications that duplicated each other or were not intended for upper-level nurses, and with a publication date outside the selected period, according to Figure 1.
It is noteworthy that in several publications there was the requirement of more than one specialty and minimum requirement in the same job offer, which were inserted in full in the analysis of the results.

Initially, the search was conducted on Facebook, using two combinations of hashtags at two moments: #vacancies #nursing and #jobs #nursing. 70 publications were located with the first combination, according to the inclusion criteria, 15 publications were selected and 2 that were duplicates were excluded. Then, the search was performed with the second combination 48 publications were found, 23 selected and 1 excluded. Therefore, the total Facebook sample was 35 publications.

It was carried out on Instagram. For this medium, it is not possible to make combinations of hashtags. Therefore, the search was conducted in two moments with the hashtags #vacancynurse found 2 publications. Subsequently, the hashtag #vacancies, was used, locating a total of 4,876 publications including vacancies in various professions, of which 94 publications were selected according to the inclusion criteria. Of this total, 25 repeated posts were excluded, with the final Instagram sample being 71 posts.

Finally, the search was conducted on Twitter by crossing the following hashtags: #vacancy and #nurse, combined by the Boolean operator "OR". A total of 1,177 publications were located, from which 11 were selected according to the inclusion criteria.

![Flowchart of the selection of publications.](image)

Source: Own authorship, 2021.

Simple descriptive statistics resources, such as absolute and relative frequency, were used to analyze the data. Understand the phases of reading, categorizing, and processing the data using Microsoft Excel 2019.
The predominant information in the publications was organized into five categories, which were named with a hashtag, representing the grouping analyzed: #specialized nursing, #minimum #job requirements, #remuneration and #working hours.

The source of data collection for the present study are the publications in social networks of free access, in the case of data from public domains, in this sense, the approval is waived by the Research Ethics Committee with human beings. However, according to Resolution 466/2012 of the National Health Council, the identities of those responsible for the publications were kept anonymous.

RESULTS

The publications were analyzed and their data organized in a table, in the form of categories.

Of the 117 publications, 3 (2.55%) corresponded to the North region, 31 (26.35%) to the Northeast, 11 (9.35%) to the Midwest, 58 (49.30%) to the Southeast, and 18 (15.30%) to the South region.

Table 1 corresponds to the category #nursespecialists, containing the information referring to the specialties requested to fill the vacancies of nurses, separated by region. In four publications there was more than one specialty requested, considering all the specialties present in the individual publication.

Table 1 - Specialties required in the vacancies for nurses. Brazil, 2021 (n = 117).

<table>
<thead>
<tr>
<th>Region/Specialties</th>
<th>North</th>
<th>Northeast</th>
<th>Midwest</th>
<th>Southwest</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>f</td>
<td>n</td>
<td>f</td>
<td>n</td>
</tr>
<tr>
<td>Generalist</td>
<td>2</td>
<td>1.70%</td>
<td>23</td>
<td>19.55%</td>
<td>8</td>
</tr>
<tr>
<td>Intensivist</td>
<td>1</td>
<td>0.85%</td>
<td>2</td>
<td>1.70%</td>
<td>1</td>
</tr>
<tr>
<td>Auditor</td>
<td>0</td>
<td>0%</td>
<td>4</td>
<td>3.40%</td>
<td>0</td>
</tr>
<tr>
<td>Manager</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>Operating room</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Stomatherapist</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Continuing health education</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>0.85%</td>
<td>0</td>
</tr>
<tr>
<td>In work</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>Medical Clinic</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
</tr>
</tbody>
</table>
Regarding specialties, the Southeastern region had the highest percentage of requests for specialist nurses (47.60%), among them generalists (25; 21.25%), intensivists (21; 17.85%) and auditors (4.40%).

Figure 2, corresponding to the #minimumrequirements category, describes the requirements demanded by employers for vacancies for nurses, which are: professional experience in the area of the vacancy, having a graduate course in the area of activity, availability to work or travel, information technology, technical knowledge and skills, complementary training, good interpersonal relationship, own vehicle, and living in the area. Of the 117 publications, 82.05% (n = 96) presented the minimum requirements in the content of the publication, considering all the requirements present in each individual publication.

**Figure 2 - Requirements demanded in job vacancies for nurses advertised on social media (n = 117).**

Professional experience in the area is the most cited requirement among employers' requests with a percentage of 35.36% (n = 41), requested mainly by the Southeast region, 17.09% (n = 19). While the requirement for a graduate degree obtained a percentage of 18.78% (n = 21) and the availability of hours or travel in 13.63% (n = 13) of the publications.
In addition, table 2 shows the categories #employmentcontract, #remuneration and #workingday. The characteristics related to the employment relationship were considered, classified in permanent contracts, temporary contracts and offers derived from the selection process, remuneration, taking into account the current salary (R$ 1,100.00) and the working hours of each position.

Table 2 - Employment relationship, remuneration and working hours of vacancies from social networks. Brazil, 2021. (n = 117)

<table>
<thead>
<tr>
<th>Type of bond</th>
<th>North</th>
<th>Northeast</th>
<th>Midwest</th>
<th>Southwest</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>f</td>
<td>n</td>
<td>f</td>
<td>n</td>
</tr>
<tr>
<td>Permanente contract</td>
<td>3</td>
<td>2.55%</td>
<td>20</td>
<td>17.00%</td>
<td>9</td>
</tr>
<tr>
<td>Temporário</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>0.85%</td>
<td>1</td>
</tr>
<tr>
<td>Processo de seleção</td>
<td>0</td>
<td>0%</td>
<td>8</td>
<td>6.80%</td>
<td>0</td>
</tr>
<tr>
<td>Prática</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Salary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>0.85%</td>
<td>0</td>
</tr>
<tr>
<td>&lt; 1.00</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>1.70%</td>
<td>0</td>
</tr>
<tr>
<td>1.01 - 2.00</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>0.85%</td>
<td>0</td>
</tr>
<tr>
<td>2.01 - 3.00</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0.00%</td>
<td>2</td>
</tr>
<tr>
<td>3.01 - 4.00</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>4.01 - 5.00</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0.00%</td>
<td>1</td>
</tr>
<tr>
<td>5.01 - 6.00</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 6.01</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Não informado</td>
<td>3</td>
<td>2.55%</td>
<td>0</td>
<td>0.00%</td>
<td>8</td>
</tr>
<tr>
<td><strong>Workload</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24h/s</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>1.70%</td>
<td>1</td>
</tr>
</tbody>
</table>
30h/s  0  0%  0  0.00%  0  0%  2  1.70%  0  0%
36h/s  0  0%  1  0.85%  0  0%  3  2.55%  0  0%
40h/s o > 1  0.85%  6  5.10%  0  0%  8  6.80%  4  3.40%
Not informed  2  1.70%  21  17.85%  10  8.50%  29  24.65%  10  8.50%

Source: Research data, 2021.

In general, the job offers in the Southeast region, when compared to the other regions, presented prevalence with regard to employment relationship, income, and working hours. Specifically, the main type of employment relationship is the permanent one (40; 34.00%), besides the availability of internships (2; 1.70%), in terms of income the offer varied between 4.1 and 5.0 minimum wages (10; 8.50%) and working hours of 24 hours (8; 6.80) and more than 40 hours a week (8; 6.80%).

DISCUSSION

The nursing team acts in the daily life of health services, caring for people, in curative, preventive, managerial, and rehabilitative actions\(^\text{14}\). In the current pandemic scenario, nursing has stood out for its importance in the front line of integral and essential care for patients affected by COVID-19. In addition to the emphasis on care, many nurses have taken control of epidemiological and health management research, since work, according to Marxism, is influenced by the historical moment in which it is inserted\(^\text{11}\). In light of this, many job opportunities have arisen through the already announced need for nursing professionals. It is noteworthy that different trends in the labor market, including the shortage of professionals, are announced in the pre-COVID-19 world literature\(^\text{15}\).

The shortage of nurses is a labor market trend described in several international reports, estimating a shortage of nurses corresponding to 5.3 million professionals\(^\text{16}\). However, the dichotomous problem arises from the lack of nurses and the lack of qualified and experienced professionals for the service.

The Southeast region of Brazil, considered the most populated, presented the highest number of job opportunities for nurses, including generalists and specialists. This fact is justified by the growing number of cases that lead to the bed occupation rate by patients affected by COVID-19. The state of São Paulo stands out, classified in critical alert (above 80% occupancy) and the other states of the Southeast region in medium alert (above 60% occupancy), in the period corresponding to the month of data collection, therefore requiring a larger contingent of nurses. According to data from the observatory of the Oswaldo Cruz Foundation, in the epidemiological week corresponding from March 14 to March 20, the number of cases increased at a rate of 0.3% per day and the number of deaths by COVID-19 increased 3.2% per day\(^\text{17}\).

With the health needs presented demanding qualified health professionals, graduate studies are a differential in the insertion of nurses in the labor market, especially in the current pandemic scenario that affects the whole world. It is known that professional qualification is important to align with the growing incorporation of new technologies and improvements in care, since the workforce undergoes successive and constant
changes in terms of occupational composition, qualification and education, and change in health care\textsuperscript{(18)}.

In view of the nurses' vocation, it is worth highlighting the opportunities that graduate studies and experience in the area demanded as minimum requirements. Studies show that there is a preference for hiring nurses with specialization and professional practice\textsuperscript{(10,19)}.

This process of multiple jobs and exploitation, such as exhaustive work hours, is influenced by the economic model, capitalism, allowing an exploitative behavior of the salaried worker. The Marxist criticism resides, above all, in the way capitalism transforms everything into merchandise, including health work, appropriating the labor, the physical and cognitive strength of the producer\textsuperscript{(20)}.

On the other hand, the requirement for specialties and professional experience allows some professionals to perform multiple functions, while others cannot enter the job market. This situation encompasses the corresponding labor market trend toward unemployment, especially for professionals who intend to enter the profession, especially young people without professional experience\textsuperscript{(21)}.

It is important to highlight that the need for qualified professionals and the difficulty of insertion in the first job open the door to precarious conditions and work relations of the new positions. It is observed that the Northeast region had the most vacancies of nurses without specialization to care for patients with COVID-19, the vast majority in intensive care units. In addition, 32.47\% of the positions had no minimum requirement for hiring.

This fact is worrisome because the clinical severity profile of patients with SARS-CoV-2, sometimes admitted to the Intensive Care Unit, requires a greater demand for drugs, procedures and invasive devices, which, added to the clinical picture, result in increased risk for the patient. Thus, the consequences of clinical complications and adverse events, which may be due to incorrect care, can increase the mortality rate and hospital stay of these patients\textsuperscript{(22)}.

In addition, it is important to address the working conditions, which refer to the work environment itself and all the circumstances that affect the work, that is, they are factors that influence the process, such as salary, rights and working hours\textsuperscript{(23)}. Regarding the precarious working conditions highlighted in the publications on social networks, the temporary labor bonds stand out, in which the professional is not fully contemplated with what is provided for in the Federal Constitution and regulated in the Consolidation of Labor Laws.

All the break of worker protection laws favors that precariousness that was already worrisome in 2013, in which a third of nurses had more than one employment relationship, with 41.5\% working more than 40 hours a week and 71.7\% referring to wear and tear in the professional activity, similar to what occurs in times of the COVID-19 pandemic, that added to this, there were hundreds of complaints related to the denial of the offer of PPE by employers, improper place for workers to rest, evidencing the total contempt and devaluation with the nursing workers\textsuperscript{(24)}. 
Besides the number of temporary vacancies, it is noteworthy that more than 40% of the publications do not inform salaries and working hours, which favors the informality of the jobs. In addition, there are two internship vacancies for nurses. The hiring of paid apprentices is a silenced form of job insecurity for the graduate professional, due to the illusory relationship between the learning process and the acquisition of practice for future employment, in that most of the vacancies that require experience in the area do not consider the internship as such\(^{(25)}\).

It is known that nursing is waiting, in an arduous wait that began with Bill no. 2.295 / 2000, for the approval of a law that regulates the salary floor and the work day. This regulatory fragility, which regulates the obligations of employers towards nursing professionals, makes it possible, on a large scale, to offer job openings without the recognition that nursing deserves. It is observed that a large part of the jobs worked had a workload equal to or greater than 40 hours per week.

Undoubtedly, the pandemic highlighted to society the essential assistance of nursing, which needs recognition and better working conditions, since it was the class in which most deaths occurred due to the new coronavirus\(^{(26)}\). The International Council of Nurses (ICN), published in 2020 a document entitled "Protecting Nurses from COVID-19, a Priority: An Investigation of the ICN NSAs" revealing the catastrophic record of the number of nurses deaths by COVID-19 \(^{27}\), besides its effects, namely: anxiety, depression, stress \(^{(27)}\).

**CONCLUSION**

Knowing the scenario of hiring nurses in times of coronavirus shows an already announced trend, which is the shortage of qualified professionals to work in the labor market, in addition to the devaluing conditions that the nursing work entails.

The precariousness of the jobs offered to nursing professionals, such as temporary contracts, low wages, and long working hours, stands out. In addition, many vacancies do not require minimum requirements, and it is noteworthy that these vacancies are those with the longest working hours and low wages, demonstrating the capitalist influence on health work, especially in nursing.

The COVID-19 pandemic contributed to highlight the essentiality of nursing professionals for the promotion, prevention and maintenance of health, making it essential to seek improvements in employment nationwide with the goal of decent conditions related to the working day and salary floor, recognizing the importance of this class for the various services and health institutions.

It is considered that this study has the capacity to contribute to Nursing in that it provides subsidies for discussions about the nurse's job market, highlighting the need to value these professionals, not only during the new pandemic of the coronavirus. In addition, it makes it possible to know the current emerging scenario of work needs in the nursing specialties.
REFERENCES


