

Characterization Of The Clientele Assisted In The Respiratory Screening Of A Maternity School During The COVID-19 Pandemic

Caracterização da Clientela Atendida na Triagem Respiratória de Uma Maternidade Escola na Pandemia por COVID-19

Caracterización De La Clientela Asistida En El Cribado Respiratorio De Una Maternidad Durante La Pandemia De COVID-19

RESUMO

A infecção por COVID-19 se tornou uma emergência de Saúde Pública mundialmente. Gestantes precisam de atenção ao cuidado com a exposição ao COVID-19 pois podem desenvolver complicações clínicas importantes. Objetivo: Caracterizar a clientela atendida na sala de triagem respiratória da Maternidade Escola da UFRJ. Método: Este estudo utilizou abordagem quantitativa, método transversal, retrospectivo, descritivo-analítico a partir de pesquisa em registros de atendimentos na sala de triagem respiratória no período de março de 2020 a dezembro de 2020. Resultados: Foram coletadas 251 pacientes atendidas na sala de triagem respiratória da Maternidade Escola da UFRJ. Discussão: A gestação causa diversas alterações no corpo feminino, com isso a atividade imunológica da gestante pode ficar reduzida à processos infecciosos. Conclusões: A maioria das pacientes eram gestantes, pardas, com idade média de 27 anos. A limitação do estudo se deu pela falta de registros nos livros pelos profissionais de enfermagem, sendo necessário uma educação permanente para minimizar este tipo de erro.

DESCRITORES: Gestantes, Neonatos, Coronavírus, Pandemia, Triagem.

ABSTRACT

COVID-19 infection has become a global public health emergency. Pregnant women need to be careful about exposure to COVID-19 as they may develop significant clinical complications. Objective: To characterize the clientele treated in the respiratory triage room of the UFRJ Maternity School. Method: This study used a quantitative approach, a cross-sectional, retrospective, descriptive-analytical method based on research in records of care in the respiratory triage room from March 2020 to December 2020. Results: A total of 251 patients treated in the respiratory triage room of the UFRJ Maternity School were collected. Discussion: Pregnancy causes several changes in the female body, which can reduce the immune activity of pregnant women to infectious processes. Conclusions: Most patients were pregnant, brown, with an average age of 27 years. The limitation of the study was due to the lack of records in the books by nursing professionals, requiring ongoing education to minimize this type of error.

DESCRIPTORS: Pregnant women, Neonates, Coronavirus, Pandemic, Screening.

RESUMEN

La infección por COVID-19 se ha convertido en una emergencia de Salud Pública a nivel mundial. Las mujeres embarazadas requieren atención en cuanto a la exposición al COVID-19, ya que pueden desarrollar complicaciones clínicas importantes. Objetivo: Caracterizar a la clientela atendida en la sala de triaje respiratorio de la Maternidad Escuela de la UFRJ. Método: Este estudio utilizó un enfoque cuantitativo, método transversal, retrospectivo, descriptivo-analítico a partir de la investigación en registros de atenciones en la sala de triaje respiratorio durante el período de marzo de 2020 a diciembre de 2020. Resultados: Se recopilaron 251 pacientes atendidas en la sala de triaje respiratorio de la Maternidad Escuela de la UFRJ. Discusión: El embarazo causa diversas alteraciones en el cuerpo femenino, lo que puede reducir la actividad inmunológica de la gestante frente a procesos infecciosos. Conclusiones: La mayoría de las pacientes eran mujeres embarazadas, mestizas, con una edad promedio de 27 años. La limitación del estudio se debió a la falta de registros en los libros por parte de los profesionales de enfermería, siendo necesaria una educación continua para minimizar este tipo de errores.

DESCRIPTORES: Embarazadas, Neonatos, Coronavirus, Pandemia, Triaje.

RECEIVED: 11/26/2025 APPROVED: 12/06/2025

How to cite this article: Soares CLX, Esteves APVS, Junior JA, Souza PO, Leite HC. Characterization Of The Clientele Assisted In The Respiratory Screening Of A Maternity School During The Covid-19 Pandemic. Saúde Coletiva (Edição Brasileira) [Internet]. 2025 [acesso ano mês dia];15(92):13918-13922. Disponível em: DOI: 10.36489/saudecoletiva.2025v15i92p13918-13922

**Caroline de Lima Xavier Soares**

Master in Perinatal Health from UFRJ. Maternity School of UFRJ
ORCID: <https://orcid.org/0000-0002-3017-0225>

**Ana Paula Vieira dos Santos Esteves**

Doctor in Bioethics, Applied Ethics and Public Health from UFRJ. Maternity School of UFRJ
ORCID: <https://orcid.org/0000-0002-4932-6808>

**Joffre Amim Junior**

Doctor in Obstetrics from UFRJ. Maternity School of UFRJ
ORCID: <https://orcid.org/0000-0001-9458-0584>

**Priscila Oliveira de Souza**

Master in Perinatal Health from UFRJ. Maternity School of UFRJ
ORCID: <https://orcid.org/0000-0002-1334-4123>

**Helder Camilo Leite**

Master in Nursing Care from UFF. Maternity School of UFRJ
ORCID: <https://orcid.org/0000-0003-1092-9887>

INTRODUCTION

The year 2020 was a challenging year for everyone, as the coronavirus pandemic, which had hit the city of Wuhan in China at the end of 2019, quickly spread throughout the world. Health services saw the need to expand their beds and adapt structurally and organizationally through new flows and protocols to adequately care for these patients.

Some of these patients require special attention when it comes to care for exposure to COVID-19, as they may develop significant clinical complications. Based on WHO guidelines, the Ministry of Health has defined the risk groups for this disease, which are: people over 60 years of age; patients with chronic diseases (hypertension, cardiovascular diseases, lung diseases and uncontrolled diabetes); immunodeficiency (HIV, cancer, treatment with immunosuppressants) and pregnant women.¹

Pregnancy causes endocrine, physiological, and anatomical changes that may make these women and their fetuses more susceptible to worsening infections. Initial studies of COVID-19 during pregnancy indicated no or uncommon transmission of the virus to the fetus.^{2,3} However, other publications demonstrate vertical transmission through the detection of IgM an-

tibodies or the positive RT-PCR result of newborns hours after birth⁴⁻⁷

Several studies indicate that the most recurrent clinical manifestations in individuals affected by COVID-19 are fever, cough, fatigue, followed by less recurrent symptoms such as headache, sore throat, nausea, vomiting and diarrhea.

A meta-analysis carried out by Li involving patients from different studies identified that the main symptoms were fever (88.3%), cough (68.6%), myalgia or fatigue (35.8%), expectoration (23.2%), dyspnea (21.9%), headache or dizziness (12.1%), diarrhea (4.8%) and vomiting or nausea (3.9%).³

The symptomatic manifestations are not very specific, demonstrating that the Sars-CoV-2 virus can affect different systems. According to Sousa Neto et al 8, their systematic review of the clinical manifestations of the Coronavirus, identified among the main articles, 25 symptoms present in patients infected by the virus.

Most individuals infected by the virus have a good prognosis, but it is important to highlight that some patients need special attention regarding care with regard to exposure to COVID-19 as they can develop important clinical complications, progressing more aggressively with pneumonia and severe acute respiratory

syndrome (SARS), in addition to cardiac, hepatic and renal dysfunction.⁹

Based on WHO guidelines, the Ministry of Health defined the risk groups for this disease, which are: people over 60 years of age; patients with chronic diseases (hypertension, cardiovascular diseases, lung diseases and uncontrolled diabetes); immune deficiency (HIV, cancer, treatment with immunosuppressants) and pregnant women.¹

Given these exposures, the objective was to characterize the clientele served in the respiratory triage room (care for pregnant women and newborns with suspected COVID-19) at the UFRJ Maternity School.

METHODS

This study was part of the professional master's dissertation in Perinatal Health at the Maternity School of UFRJ, whose objective was to structure a line of care for pregnant women and newborns with suspected COVID-19 at the Maternity School of UFRJ. The study has a quantitative, cross-sectional, retrospective approach and a descriptive-analytical method based on research based on records of care in the medical records and sectoral books of patients treated in the respiratory triage room from March 2020

to December 2020.

The quantitative approach is defined as the measurement of opinions and habits of a universe. Through a sample that represents it statistically, the researcher translates opinions and numbers into information that will be analyzed and classified. The descriptive-analytical method is one in which factors or variables that relate to the phenomenon are identified, recorded and analyzed.¹⁰

The cross-sectional approach occurs when the researcher defines a short period to establish the study. Data is collected at one point in time. The retrospective approach indicates that the researcher will explore facts from the past.¹¹

In order to provide security to women, their families and the Maternity Hospital staff, the chosen setting was the Emergency Service of the Maternity School of UFRJ, a public maternity hospital with federal education, a reference for Basic Health Units (UBS) that make up CAP 2.1 of the city of Rio de Janeiro, located in this city. Where symptomatic women would certainly receive their first care there.

The study participants consisted of pregnant women, newborns, and postpartum women treated in the respiratory triage room. The inclusion criteria were: patients treated in the respiratory triage room from March 2020 to December 2020. The exclusion criteria were: patients not treated during the defined period, non-pregnant patients, postpartum women, and newborns, and patients who were not treated in the respiratory triage room. In this sense, the sample was considered for convenience, as we collected all medical records from the proposed period.

Data collection was performed by obtaining information from the sector's service logbook. The variables were analyzed in terms of means and standard deviations, descriptively from frequency and percentage tables. The classification variables will be presented in tables containing absolute (n) and relative (%) frequencies.

The research project was sent to the Ethics and Research Committee of

the Maternity School of UFRJ, in accordance with Resolution 466/12 and 510/16 of the CNS, with approval of the research in accordance with CAAE 34720920.0.0000.5275.

RESULTS

Records of 264 patients treated in the respiratory triage room of the UFRJ Maternity Hospital were collected. From this sample, 13 patients were excluded because they did not meet the inclusion criteria for the study, as they were not pregnant, postpartum or newborn. Therefore, our sample consisted of 251 patients.

“ Of the patients seen, 228 (91%) were pregnant and 19 (7%) were postpartum, one was a patient in a situation of abortion, and three had no record. ”

Although the care took place without the presence of a companion due to the risk of contamination, 173 (69%) patients stated that they had a companion waiting in the waiting room.

Regarding prenatal care, 91 (36.3%) had prenatal care at the Maternity School, 68 (27%) had prenatal care at CAP2.1 units that are referenced by the Maternity School, 67 (27%) had prenatal care at various health services, 18 (7%) did not have prenatal care and in seven (3%) appointments there was no record of the patient's prenatal care.

Among the symptoms of SARS-CoV2 infection, 176 patients reported two or more symptoms of the disease. Cough was

the symptom that had the highest incidence in our patients (9.1%), followed by fever (7.9%), headache (5.6%), runny nose (4.5%), body pain (3.8%) and shortness of breath (3.6%).

Regarding previous pathologies, 183 (72.9%) patients declared not having any comorbidities. Among the main comorbidities are arterial hypertension (9.2%), gestational diabetes (6.1%), hypothyroidism (2.7%) and bronchitis (1.9%). Of the patients treated, 110 (43.8%) declared themselves to be brown, followed by 65 (25.9%) patients who declared themselves to be white and 53 (21%) black, there was no record regarding the color of 17 (7%) patients.

Regarding parity, 148 (59%) patients were multiparous. 89 (35.6%) were in the third trimester of pregnancy, 66 (26.5%) in the second trimester and 34 (13.6%) in the first trimester; 22 (9%) patients had no record.

A total of 103 nasopharyngeal swabs were collected, including rapid tests and RT-PCR, from adult patients and 1 swab from a newborn during the study period.

The outcome of this line of care in the respiratory triage room was 31 patients admitted to the unit, 19 (7.6%) in the shared accommodation and 12 (4.8%) in the obstetric center. The average age of the patients treated was 27.67 years, with 15 years being the youngest age presented and 45 the oldest age, with a standard deviation of 6.654.

Regarding newborns, 36 newborns were treated in the respiratory triage room during the study period. 23 (63.9%) of the newborns treated were up to 28 days old, the minimum age was 4 days and the maximum was 90 days, the average was 23.8 days, with a standard deviation of 15.89.

All babies were born at the Maternity School, however, in relation to the prenatal care of the mothers of the babies attended, 18 (58%) had prenatal care at the Maternity School, eight (22%) had prenatal care at the UBS of CAPS 2.1 where the ME is a reference and nine (25%) had prenatal care at other services.

Fever was the symptom with the high-

est incidence in the visits (10), followed by cough (six) and nasal congestion (three). Six (16.6%) babies were admitted to the Neonatal ICU, two (5.5%) left the institution without their consent, and eight (22.2%) were discharged. Due to lack of records, there is no report on the fate of 20 (55.5%) babies treated in the respiratory triage room.

DISCUSSION

Pregnancy causes several changes in the female body, mainly hormonal changes. The pregnant woman's immune activity may be reduced, making her susceptible to infectious processes, especially respiratory tract infections.

According to Nogueira et al ¹², which evaluated the epidemiological bulletin in Brazil, it was noted that the age of the patients treated ranged between 12 and 49 years, with a concentration between 20 and 39 years. In the maternity school, the age of the patients treated in the respiratory triage room ranged between 15 and 45 years, with a concentration between 18 and 35 years, corroborating the study data.

Regarding gestational age, most of the patients treated were in the third trimester of pregnancy, which also occurred in a study carried out in a maternity hospital in Fortaleza where the average gestational age was 35 weeks.¹³ Studies link Covid-19 infection in the third trimester to a higher risk of preterm birth and fetal distress.¹⁴

Regarding the color that the patient self-declares, Nogueira et al ¹² stated that the majority of patients seen in his study declared themselves to be brown, which was also seen in patients seen in the respiratory triage room at the UFRJ Maternity School.

Although most patients self-reported having no comorbidities, the main comorbidities presented were gestational diabetes and hypertension. As in non-pregnant patients, the presence of any comorbidity increases the risk of the patient having more severe respiratory distress, with a greater chance of hospitalization and

death. Studies indicate that patients with heart disease, diabetes and hypertension have the highest risk of a more severe outcome from the disease.¹³

Pregnant women with COVID-19

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Compared to other viral respiratory infections, there is no scientific evidence that COVID-19 causes serious consequences for pregnant women.

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present symptoms similar to those of non-pregnant patients, with common symptoms such as fever and cough, which corroborates this finding, stating that the most common clinical characteristics in 90 pregnant patients include fever, cough and dyspnea.^{14,15}

CONCLUSION

Health services and nursing care have adapted to the needs of the clientele served during the pandemic. Therefore, characterizing patients with suspected or confirmed COVID-19 treated for respiratory triage during this period was necessary, above all, to understand this profile and thus offer quality and safe nursing care to this clientele.

The majority of patients treated were pregnant women in the third trimester, of mixed race, with an average age of 27 years old, and who received prenatal care at the UFRJ Maternity School. Regarding newborns, the majority of babies treated were up to 28 days old and all were born at the UFRJ Maternity School.

This study demonstrated the importance of establishing a respiratory triage room for this type of care, counting the total number of clients served in the defined period, in addition to creating a database that will support future research.

The limitation was caused by the lack of records in the sector's care logbooks. An appropriate continuing education program is needed to minimize this type of error and thus further ensure patient safety in terms of communication and information.

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