Cogitare Enfermagem

CHARACTERIZATION OF THE CLINICAL URGENCY CARE VISITS IN A HABITUAL RISK MATERNITY HOSPITAL: A CROSS-SECTIONAL STUDY

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ABSTRACT

Objective: to characterize the emergency care services offered in a habitual risk maternity hospital. Method: a quantitative, cross-sectional and retrospective research study, with analysis of the indicators corresponding to the emergency care services of a maternity hospital from a capital city in southern Brazil, from January 2018 to December 2019. The data were subjected to descriptive analysis. Results: of the 25,451 care visits, 24,307 corresponded to pregnant women, 944 were puerperal women, 119 had undergone miscarriages, 46 are not pregnant, and 35 cases were undefined. The mean number of visits per month was 1,060; with greater demand in the afternoon shift, in the age group between 20 and 29 years old, with a minimum of eight and a maximum of 61 years old; with third trimester of pregnancy and green urgency risk rating representing higher demand. The most frequently recorded reason to seek care was abdominal pain. Conclusion: the research contributed to understanding in which Health Care Network services communication should be strengthened, improved and maintained.

DESCRIPTORS: Women's Health; Obstetric Nursing; Nursing Care Standards, Pregnant Women; Welcoming.

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INTRODUCTION

Pregnancy, delivery and the puerperium are periods that involve physiological, physical, social and emotional changes that, when they do not present risks, should be understood as a physiological and normal process. Most pregnant women do not have risk factors for complications in any of the phases; despite this, the concept of normality is not always standardized, leading to greater medicalization of a process that should be treated as physiological. It is understood that the care provided by health professionals is a fundamental aspect to ensure quality assistance and focus on women, making it possible to see these moments as a healthy life experience[1].

This continuous care by health professionals to pregnant women is called prenatal care and should be initiated early in time, preferably until the 12th gestational week, without discharge. At least six consultations are recommended, performing obstetric risk stratification in all of them, to early detect risk factors or complications. By providing greater quality and uniqueness in care, ensuring comprehensiveness and care, in addition to correctly targeting pregnant women within the health care network (HCN), it is possible to reduce maternal and child mortality and morbidity [1].

Pregnant women can be stratified into the habitual risk, intermediate risk and high risk categories, a factor that defines their connection to prenatal care and the referral hospital for complications and delivery. Thus, the two decisive factors for adequate care are risk stratification — from the beginning, carried out in all prenatal consultations — and the link to the most opportune hospital or maternity hospital for care[2]. According to the Ministry of Health (Ministério da Saúde, MS), nearly 10% of the pregnancies are characterized as high risk, while in the 90% of the habitual risk cases, nurses are attributed the duty to assist pregnant women, parturients, puerperal women and newborns[3-4].

The Ministry of Health proposes the implementation of a Reception and Risk Classification service (R&RC) to optimize care for pregnant women at the entrance of referral and maternity hospitals. Its objective is to identify obstetric emergencies and urgencies, offering timely care to the patients, rather than a first-come, first-served basis; pointing to nurses (either obstetric or generalist) as the professionals responsible for the risk classification tool[5].

Risk classification is considered a care practice inherent to nurses who must be duly trained regarding its applicability. After evaluating the pregnant or postpartum woman, in accordance with her complaint and clinical condition, a classification is made among five levels of priority for care, based on the 12 main signs and symptoms of greater severity, according to the urgency presented. These levels are named with colors, which correspond to a maximum time for medical care, varying from immediate care (red), in up to 15 minutes (orange), in up to 30 minutes (yellow), in up to 120 minutes (green) and non-priority care or referral as agreed to primary care (blue)[5].

A study carried out in the obstetric emergency department of a maternity hospital in Fortaleza, Ceará, identified that most of the women classified as red and orange were not seen within the recommended time. In addition to that, the need to clarify the population about the search for specialized care and its functioning in the care network was identified, as a considerable number of women outside the pregnancy-puerperal cycle would receive the necessary care in the health unit itself[6].

Given the above, it is necessary to identify the health needs of the population served in maternity hospitals and provide qualified care by raising the main complaints recorded, in addition to evaluating the obstetric risk classification performed, identifying the complexity of maternity care. Therefore, the objective of this study was to characterize the emergency care services offered in a habitual risk maternity hospital.

METHOD

This is a descriptive and quantitative study with a cross-sectional approach and retrospective collection of secondary data, observing the Strengthening the Reporting of Observational Studies in Epidemiology checklist (STROBE Statement). It was carried out in a habitual risk maternity hospital in the city of Curitiba, Paraná, Brazil, which attends to a mean of 200 monthly deliveries with a mean of 70% vaginal deliveries and 30% C-sections, with a team comprised by at least one Obstetric Nurse (ON) per shift at the Emergency Service, the professional responsible for carrying out all Risk Classifications in the pregnant women assisted.

The data were obtained from the diverse information contained in the record sheet of the emergency care services between January 2018 and December 2019. Emergency care services were included, except for newborn care, between January 2018 and December 2019, totaling 25,451 records. No record was excluded.

To organize the data, an Excel instrument was prepared to contain data such as the medical record number, age, gestational age, reference health unit, care shift, reason for seeking care, risk classification and actions performed in the maternity hospital. Data collection took place from February to April 2020.

All visits with incomplete information on gestational age were considered as belonging to the "pregnancy-puerperal period", as long as they had this information in the same record. At the same time, all those appointments in which gestational age was not filled out were classified as "others"; as well as those in which the information of a non-pregnant patient, male patient or maternity employee was included; and/or those whose medical management records included complaints related to situations incompatible with pregnancy, such as those associated with intrauterine devices (IUDs), dysmenorrhea, metrorrhagia, post-bariatric surgery, psychotic crisis with negative pregnancy serological tests, among others. Furthermore, consultations whose gestational age information was not filled out were considered "undefined", and most of them presented a single appointment, not being possible to define their physiological status through other consultations. Finally, "postpartum" corresponds those return visits for care after delivery, regardless of the mode of birth, and "post-miscarriage" are appointments for women who had an abortion and returned for further care, regardless of curettage.

The reasons for spontaneous demand, referral to health services and postpartum consultation, which led the patients to seek care at the maternity hospital, were listed and addressed. Treatment of these data was referenced by the main puerperal pregnancy complications contained in the Obstetric R&RC Manual and the High-Risk Pregnancy manual: Technical Manual, both from the Ministry of Health[5,7].

Data treatment and interpretation were conducted by means of descriptive analysis in Microsoft Excel 2013, organized in tables and graphs. The research was approved by the Ethics Committee for Research with Human Beings of the institution locus of the study under opinion number 4,640,433, on February 3rd, 2020.

RESULTS

According to the inclusion criteria, the 25,451 visits performed in the maternity hospital emergency service from January 2018 to December 2019 were analyzed. Of these, 24,307 (95.51%) were pregnant, 944 (3.71%) were postpartum women, 119 (0.47%) were women who had an abortion and needed care after the diagnosis, 46 (0.18%) were not pregnant women and 35 (0.14%) were considered undefined.

The monthly mean of these visits was 1,060, with the lowest demand in September 2018 (951 - 3.74%) and the highest demand in January 2018 (1,187 - 4.66%). The shift with the highest demand was the afternoon shift (9,705 - 38.13%), followed by the morning (8,319- 32.69%) and night (7,426 - 29.18%) shifts, and this information was not filled out in one visit.

Regarding the age of the patients, the group between 20 and 29 years old prevailed, with a minimum age recorded of eight years old - a pregnant woman - and a maximum of 61 years old - a non-pregnant patient in a psychotic crisis. The mean of return visits for further care obtained in 2018 was 2.89; 4,360 users were treated in the respective year. In 2019, the mean of return visits was 2.97; and 4,302 users were treated.

Among the pregnant women (24,307), greater search for the maternity hospital was identified during the third trimester (13,461 - 52.89%). Regarding the care provided to puerperal women (944) and their respective mode of delivery, 488 (51.69%) were cases with normal postpartum, 450 (47.67%) with postpartum C-section, and six (0.64%) did not have this information recorded.

Regarding the obstetric risk classification, there was predominance of green urgency (16,136 - 63.40%). It is noted that, of the 2,027 (7.96%) visits that did not have their classification recorded, 1,090 (53.77%) were due to the absence of a trained professional at the time to apply the instrument, 645 (31.82%) due to incomplete information, 280 (13.81%) for absence of the classification form and 12 (0.59%) were blank. Table 1 provides more detailed information.

Table 1 - Characterization of the visits recorded in the emergency care services of a habitual risk maternity hospital between 2018 and 2019. Curitiba, PR, Brazil, 2020

Variables	2018		2019	
	N	%	n	%
Visits	12,633	100	12,818	100
Pregnant women	12,031	95.23	12,276	95.51
Puerperal women	502	3.97	442	3.45
After miscarriage	62	0.49	57	0.44
Not pregnant	27	0.21	19	0.15
Undefined	11	0.09	24	0.19
Age of the patients (years old)	12,633	100	12,818	100
<10	0	0	1	0.01
10 ⊢ 20	1,886	14.93	1,873	14.61
20 ⊢ 30	7,353	58.20	7,341	57.27
30 ⊢ 40	3,093	24.48	3,333	26.00
40 ⊢ 50	301	2.38	265	2.07
50 ⊢ 60	0	0	3	0.02
60 ⊢ 70	0	0	2	0.02
Gestational age	12,633	100	12,818	100
1st trimester (0 – 13 weeks)	2,672	21.15	2,851	22.24

2nd trimester (14 – 27 weeks)	2,458	19.46	2,700	21.06
3rd trimester (28 – 40 weeks)	6,826	54.03	6,635	51.76
≥ 41 weeks	51	0.40	36	0.28
Pregnant women with no GA described	24	0.19	54	0.42
Postpartum	502	3.97	442	3.45
After miscarriage	62	0.49	57	0.44
Not pregnant	27	0.21	19	0.15
Undefined	11	0.09	24	0.19
Obstetric risk classification	12,633	100	12,818	100
Blue	2,121	16.79	1,590	12.40
Green	7,838	62.04	8,298	64.74
Yellow	1,501	11.88	1,889	14.74
Orange	74	0.59	109	0.85
Red	1	0.01	3	0.02
Not classified	1,098	8.69	929	7.25

Source: The authors.

Among the visits classified as Orange (183 - 0.72%), 162 (8.52%) were pregnant women and 21 (11,48%) were puerperae. The reasons for seeking maternity care in this group were mostly abdominal and related pain (51 - 27.87%), referrals from other health services (47 - 25.68%), headache and related pain (19 - 10 .38%), vaginal blood loss (16 - 8.74%) and postpartum return visits (16 - 8.74%). Among these, the referrals from other health services classified as orange, according to the medical evaluation record, 42 (89.36%) were pregnant women and five (10.64%) were postpartum women.

Of the visits classified as Red (four - 0.02%), three (8.52%) were pregnant women and one (25%) was not pregnant. The reasons to seek care in the maternity hospital for this group were others (three - 75.00%) and fainting or general malaise and similar symptoms (one - 25.00%). According to the medical evaluation record, these reasons were based on complaints of syncope, suspected acute myocardial infarction (AMI), psychiatric outbreak and shortness of breath associated with pain (one each - 25% each).

From the perspective of analysis of the risk classification corresponding to the gestational age of the consultations (Table 2), the green classification prevailed, followed by blue, with the exception of visits for the second gestational trimester and for postpartum women, in which the risk profile was shown as habitual to intermediate, as they are predominantly classified as green and yellow. In addition to that, assistance to postpartum women presented the highest percentages of yellow and orange classification, indicating greater complexity of care in this group.

Table 2 - Obstetric risk classification by gestational age, 2018 and 2019. Curitiba, PR, Brazil, 2020

Variables	2018		2019	
	N	%	n	%
1st trimester	2,672	100	2,851	100
Blue	409	15.31	348	12.21
Green	1,749	65.46	1,876	65.80
Yellow	305	11.41	410	14.38
Orange	16	0.60	22	0.77
Red	0	0	1	0.04
Not classified	193	7.22	194	6.80
2nd trimester	2,458	100	2,700	100
Blue	312	12.69	262	9.70
Green	1,650	67.13	1,865	69.07
Yellow	287	11.68	368	13.63
Orange	18	0.73	23	0.85
Red	1	0.04	0	0
Not classified	190	7.73	182	6.74
3rd trimester	6,826	100	6,635	100
Blue	1,261	18.47	890	13.41
Green	4,085	59.84	4,229	63.74
Yellow	806	11.81	969	14.60
Orange	30	0.44	52	0.78
Red	0	0	1	0.02
Not classified	644	9.43	494	7.45
≥ 41 weeks	51	100	36	100
Blue	20	39.22	6	16.67
Green	23	45.10	21	58.33
Yellow	6	11.76	3	8.33
Orange	0	0	1	2.78
Not classified	2	3.92	5	13.89
Pregnant women with no GA described	24	100	54	100
Blue	5	20.83	12	22.22
Green	14	58.33	29	53.70
Yellow	2	8.33	10	18.52
Not classified	3	12.50	3	5.56
Puerperal women	502	100	442	100
Blue	79	15.74	47	10.63
Green	273	54.38	232	52.49
Yellow	89	17.73	118	26.70
Orange	10	1.99	11	2.49
Not classified	51	10.16	34	7.69
After miscarriage	62	100	57	100
Blue	22	35.48	15	26.32
Green	27	43.55	30	52.63
Yellow	5	8.06	8	14.04
Not classified	8	12.90	4	7.02

Undefined	11	100	24	100
Blue	3	27.27	2	8.33
Green	4	36.36	12	50.00
Yellow	0	0	2	8.33
Not classified	4	36.36	8	33.33
Not belonging to the pregnancy-puerperium period	27	100	19	100

Source: The authors.

As for the general reasons for seeking care in this service, there were a total of 21 main situations, the most prevalent being as follows: abdominal pain, low back pain, uterine contractions (8,125 - 31.92%); test results (2,806 - 11.03%); vaginal blood loss (2,373 - 9.32%); referral from primary or secondary care (2,134 - 8.38%); end-of-gestation follow-up evaluation (2,081 - 8.18%); headache, dizziness, vertigo, epigastralgia, hypertension (1,402 - 5.51%) and loss of vaginal fluid, discharge (1,364 - 5.36%). The other reasons presented a percentage below 5%.

By analyzing the reasons for seeking the maternity hospital, from the perspective of gestational age, it was possible to identify the most common symptoms of each phase of the pregnancy period (Table 3).

Table 3 - Reasons to seek care in the maternity hospital according to gestational age, 2018 and 2019. Curitiba, PR, Brazil, 2020

Variables	2018		2019	
	N	%	n	%
1st trimester	2,672	100	2,851	100
Vaginal blood loss	840	31.44	755	26.48
Test results	499	18.68	633	22.20
Abdominal pain, back pain, uterine contractions	466	17.44	496	17.40
Others	221	8.27	224	7.86
Referral from primary or secondary care	184	6.89	259	9.08
Headache, dizziness, vertigo, epigastralgia, hypertension	157	5.88	189	6.63
Nausea and vomits	140	5.24	138	4.84
Vaginal fluid loss, secretions	69	2.58	75	2.63
Urinary complaints	72	2.69	61	2.14
Trauma	24	0.90	21	0.74
3rd trimester	6,826	100	6,635	100
Abdominal pain, back pain, uterine contractions	2,796	40.96	2,730	41.15
End of pregnancy follow-up evaluation	1,055	15.46	980	14.77
Referral from primary or secondary care	612	8.97	654	9.86
Others	580	8.50	498	7.51

Test results	487	7.13	550	8.29
Vaginal fluid loss, secretions	498	7.30	488	7.35
Headache, dizziness, vertigo, epigastralgia, hypertension	303	4.44	261	3.93
Vaginal blood loss	172	2.52	129	1.94
Stopped or reduced fetal movements	121	1.77	100	1.51
Reassessment	76	1.11	100	1.51
Nausea and vomits	83	1.22	103	1.55
Trauma	43	0.63	42	0.63
≥ 41 weeks	51	100	36	100
End of pregnancy follow-up evaluation	25	49.02	21	58.33
Others	11	21.57	6	16.67
Abdominal pain, back pain, uterine contractions	9	17.65	7	19.44
Referral from primary or secondary care	6	11.76	2	5.56
Postpartum	502	100	442	100
Postpartum return visit	462	92.03	391	88.46
Referral from primary or secondary care	21	4.18	36	8.14
Evasion	14	2.79	9	2.04
Fever, infection signs	2	0.40	0	0.00
Others	3	0.60	6	1.36
After miscarriage	62	100	57	100
Return visit after miscarriage	55	88.71	45	78.95
Test results	2	3.23	5	8.77
Referral from primary or secondary care	3	4.84	3	5.26
Others	2	3.23	2	3.51
Vaginal blood loss	0	0.00	2	3.51
Pregnant women with no GA described	24	100	54	100
Test results	3	12.50	22	40.74
Vaginal blood loss	9	37.50	10	18.52
Referral from primary or secondary care	5	20.83	13	24.07
Others	5	20.83	6	11.11
Abdominal pain, back pain, uterine contractions	2	8.33	3	5.56
Not belonging to the pregnancy-puerperium period	27	100	19	100
Undefined	11	100	24	100

Source: The authors.

The reasons for the referrals from the Health Unit to the Maternity Hospital were grouped into 23 main situations and are listed in Table 4.

Table 4 - Reasons for the referrals from the Health Unit to the Maternity Hospital, 2018 and 2019. Curitiba, PR, Brazil, 2020

Variables	2018		2019	
	N	%	n	%
Reasons for the referrals from the Health Unit to the Maternity Hospital	986	100	1,148	100
Abdominal pain, back pain, uterine contractions	181	18.36	227	19.77
End of pregnancy follow-up evaluation	174	17.65	194	16.90
Headache, dizziness, vertigo, epigastralgia, hypertension	77	7.81	88	7.67
Miscarriage, possible miscarriage	62	6.29	84	7.32
Vaginal blood loss	73	7.40	84	7.32
Fever, infection signs	32	3.25	49	4.27
Urinary complaints	41	4.16	46	4.01
Vaginal fluid loss, secretions	40	4.06	40	3.48
Pregnancy complications	30	3.04	36	3.14
Fetal complications	33	3.35	26	2.26
Nausea and vomits	9	0.91	19	1.66
Reassessment	21	2.13	18	1.57
Shortness of breath, respiratory problems	3	0.30	11	0.96
Stopped or reduced fetal movements	19	1.93	11	0.96
Trauma	9	0.91	8	0.70
Postpartum complications	17	1.72	7	0.61
Consultation and test results	19	1.93	7	0.61
Fainting, general malaise	9	0.91	4	0.35
Diabetes	6	0.61	0	0.00
Violence	4	0.41	0	0.00
Complications after miscarriage	2	0.20	1	0.09
Unspecified complaint	89	9.03	79	6.88
Others	36	3.65	109	9.49

Source: The authors.

Two reasons stand out, such as abdominal and related pain (408 - 19.12%) and referral for end of pregnancy follow-up evaluation (368 - 17.24%). In addition, the "Others" group shows an important number, as it encompasses several infrequent complaints.

This said, the outcome of the clinical evaluation of all the care visits (25,451 - 100%)

resulted in 13 most common actions. They are as follows: scheduling, performance or results of tests; medication prescribed or administered; tests and medication; guidelines; routine monitoring of gestational hypertension; confirmed abortion; referral to other health services; others; evasion; transfer to another health service; referral to another sector of the maternity hospital; course of action not filled out; and hospitalization due to labor.

The most common outcome was scheduling, performance or results of tests (8,699 - 34.18%), followed by medication prescribed or administered (7,392 - 29.04%). The least reported situation was hospitalization due to labor (five - 0,02%). Regarding the referrals to other services (482 - 100%), 258 (53.53%) were directed to the high-risk service, 112 (23.24%) to the health service to which they are linked or to primary or reference care, 80 (16.60%) to other specialties, 26 (5.39%) to the Emergency Care Unit (ECU) and six (1.24%) to the medium-risk service. OF the referrals to other sectors within the maternity hospital (104 - 100%), 72 (69.23%) were transferred to prenatal care at the maternity hospital and 32 (30.77%) to the maternity outpatient service.

DISCUSSION

In this study, the most expressive age group represented in the visits was between 20 and 29 years old, followed by 30 to 39 years old, data that are similar to the Brazilian indicators of DataSUS, indicating that women have children later in life. From 1994 to the last 2018 census, the predominant maternal age group among live births by occurrence was between 20 and 29 years old; however, since 2010 the group from 30 to 39 years old has drawn the attention for exceeding that of 10 to 19 years old, therefore being the second most prevalent age group[8].

In a research study carried out in a reference maternity teaching hospital in the city of Recife, Pernambuco, it was identified that, of the 316 obstetric consultations, more than 64% corresponded to pregnant women in the third gestational trimester, followed by the second trimester with 17%, the first with 13, 2%, puerperium with 3.2% and miscarriages with 2.2%[9]. In addition, in another study conducted in a habitual risk maternity hospital from the state of Rio Grande do Sul, similar conditions were identified among the 413 obstetric risk classification service forms, in which 89.9% of the consultations took place in the third gestational trimester, followed by the first trimester with 5.0%, second trimester with 3.9% and postpartum with 1.2%[10]. Such surveys are in line with this study in terms of the proportion of visits by gestational age, as the demand for care was greater in the third trimester.

As for the reasons to seek maternity care, in a study involving 736 women seen in September 2013 at a referral hospital for high-risk pregnancy located in Fortaleza, Ceará, it was found that 555 had some symptom that warranted seeking the service. The most frequently mentioned reasons were pain (42.1%) and transvaginal bleeding (22.3%)[6]. In another research study including 413 care visits, 261 women also presented abdominal pain, back pain, uterine contractions and similar symptoms as main complaints[10]. Comparatively, the visits analyzed indicated abdominal pain and similar symptoms as the main reason for seeking maternity care, with an even higher percentage adding up to headaches and the like, as well as urinary complaints, which also refer to the "pain" symptom, corroborating the findings of the aforementioned studies. On the other hand, vaginal blood loss was the fourth cause of greater demand for the service, followed by test results and referrals from services mentioned as causes of greater demand for care in tertiary-level care.

Among the physiological changes reported during the puerperal pregnancy period we found weakness, abdominal pain/cramps/flatulence, hemorrhoids, vaginal discharge, urinary complaints, breathing difficulties, breast tenderness and low back pain, among others[1]. The changes during the puerperium that must be attended to and followed-up by

primary care were listed by the Municipal Health Department of Curitiba, and the clinical condition of mastitis with 48 hours of treatment without improvement and breast abscess is responsibility of tertiary-level care. In addition, fever, vaginal bleeding, pelvic pain or infection, foul-smelling leukorrhea, changes in blood pressure, frequent dizziness and painful or cramped breasts are warning signs that should be evaluated at the health unit and hospital referral, when necessary[11]. According to a review study, the main complications found in the puerperium that can lead to demand for urgent care were puerperal infection, puerperal hemorrhage and puerperal mastitis[12]. According to the study, among the main reasons for postpartum care, there were issues involving surgical wound, infection; breast-related complaint - mostly mastitis; and fever.

Vaginal blood loss was also one of the main reasons for seeking the maternity hospital. According to the high-risk technical manual there are eight clinical classifications for miscarriage. In addition, it can occur early in time, when in the 13th gestational week; or late, when between the 13th and 22nd week[7]. In relation to the reason to seek the maternity hospital due to miscarriage or possible miscarriage, most of the cases were in the first trimester.

In the obstetric risk classification, other studies identified the Green color as the most assigned to the patients, followed by Yellow or Blue[6,9,13]; a trend that is repeated in this research, noting the prevalence of green, yellow and blue, characterizing care of low to intermediate complexity[5].

The limitations of this study refer to incomplete filling out of the emergency care spreadsheet in the risk classification adopted in the service. Another limitation is related to the impossibility of generalizing the results obtained in the research, as only one health service is considered.

CONCLUSION

Identifying the profile of patients assisted in the maternity hospital emergency care unit made it possible to understand in which services communication between the health unit and the maternity hospital should be reinforced, improved and maintained. Thus, it becomes possible to design strategies to avoid overload in the maternity hospital and improve the Health Care Network care flow. With this it is sought to revitalize a universal, comprehensive, unbiased and resolute Unified Health System

Nevertheless, there is a need to fill out the information in the emergency care document for a full analysis how the tool is applied in the service. It is also indispensable to train the maternity hospital professionals to apply the R&RC, the emergency care team to fill out the document correctly and completely and primary care professionals to perform the correct counter-referral of patients within the HCN, as well as to provide education in health for the users to seek the proper care level according to their needs, providing resoluteness in an ideal time.

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Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - Trigueiro TH, Vicari K, Janiacki K da L; Drafting the work or revising it critically for important intellectual content - Trigueiro TH, Vicari K, Janiacki K da L, Rosa AP da; Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - Trigueiro TH. All authors approved the final version of the text.