Clinical and epidemiological profile of patients assisted in a maternal intensive care unit in the federal district.

RESUMO | Objetivo: Caracterizar perfil de pacientes encaminhadas para a UTI materna de um hospital público do Distrito Federal. Método: estudo quantitativo de caráter descritivo, transversal e analítico, pautado em dados secundários retroativos obtidos através do livro de admissões da UTI Materna do Hospital Materno Infantil de Brasília, realizando um comparativo entre o ano de criação junho de 2013-2014 e junho de 2019-2020. A Análise estatística descritiva foi realizada por meio de frequência absoluta e frequência relativa. Resultados: Os dados evidenciaram público atendido é exclusivamente feminino, com maior prevalência da faixa etária entre 20 e 29 anos de idade, com média de 30,27 anos de idade. O diagnóstico prevalente foi de Pré-eclâmpsia (17,12%). A transferência para outros setores do mesmo hospital foi o principal desfecho. Conclusão: As causas obstétricas diretas representam a maior parte das internações no setor. Em geral, são mulheres jovens e com diagnostico prioritário de Síndromes Hipertensivas.
Descritores: Unidades de terapia intensiva; Obstetrícia; Perfil de saúde.

ABSTRACT | Objective: To characterize the profile of patients referred to the Maternal ICU of a public hospital in the Federal District. Method: quantitative study of descriptive, cross-sectional and analytical nature, based on retrospective secondary data obtained through the Maternal ICU admissions book of the Materno Infantil Hospital of Brasilia, making a comparison between the year of creation June 2013-2014 and June 2019-2020. Descriptive statistical analysis was performed using absolute frequency and relative frequency. Results: The data evidenced public attended is exclusively female, with a higher prevalence of the age group between 20 and 29 years old, with an average of 30.27 years old. The prevalent diagnosis was preeclampsia (17.12%). Transfer to other sectors of the same hospital was the main outcome. Conclusion: Direct obstetric causes represent most of the hospitalizations in the sector. In general, they are young women and with priority diagnosis of hypertensive syndromes.
Keywords: Intensive care units; Obstetrics; Health profile

RESUMEN | Objetivo: Caracterizar el perfil de las pacientes referidas a la UCI materna de un hospital público del Distrito Federal. Método: estudio cuantitativo de carácter descriptivo, transversal y analítico, basado en datos secundarios retrospectivos obtenidos a través del libro de ingresos de la UCI Materna del Hospital Materno Infantil de Brasilia, realizando una comparación entre el año de creación junio 2013-2014 y junio 2019-2020. El análisis estadístico descriptivo se realizó mediante la frecuencia absoluta y la frecuencia relativa. Resultados: Los datos evidencian que el público atendido es exclusivamente femenino, con una mayor prevalencia del grupo de edad entre 20 y 29 años, con una media de 30,27 años. El diagnóstico más frecuente fue la preeclampsia (17,12%). El traslado a otros sectores del mismo hospital fue el principal resultado. Conclusión: Las causas obstétricas directas representan la mayor parte de las hospitalizaciones del sector. En general, son mujeres jóvenes y con diagnóstico prioritario de Síndromes Hipertensivos.
Palabras claves: Unidades de terapia intensiva; Obstetricia; Perfil de salud.

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INTRODUÇÃO

Initially, programs for Women's Health were based on the biological role of women, restricting health demands to pregnancy and childbirth, focusing on their social role as mother and domestic, responsible for the upbringing and education of children, and family caregiver. [3,7,22]

With the advent of social rights conquered by women, in 2003 the proposal for the National Policy for Integral Attention to Women's Health (PNAISM - Política Nacional de Atenção Integral à Saúde da Mulher) was prepared, based on the sociodemographic and epidemiological profile of the time, considering and including all the claims of the segments of women and legitimized by the National Health Council (CNS - Conselho Nacional de Saúde).[12]

The National Plan is aimed at meeting the social demands of women, seeking to consolidate advances in the field of sexual and reproductive rights. It emphasizes the promotion and comprehensive health care, with emphasis on improving obstetric care, family planning, care for unsafe abortion and the fight against domestic and sexual violence. [7]

In 2011, Rede Cegonha was established as a strategy by the Ministry of Health to implement a care network that aims to structure, organize and protect rights and access to maternal and child health throughout the national territory. Respecting the principles of the Unified Health System (SUS) with a view to reducing maternal and child morbidity and mortality rates. [2,8]

The network guarantees women the right to reproductive planning and humanized care during pregnancy, childbirth and the postpartum period, at all levels of complexity, as well as the right of children to safe birth and healthy growth and development. The sufficiency of obstetric and neonatal beds (Intensive Care Unit-ICU, Intermediate Care Unit-ICU and Kangaroo) was highlighted as a necessary component to guarantee the network's safe care and assist high-risk pregnant women in the SUS. [2]

> According to the Pan American Health Organization (PAHO)/World Health Organization (WHO), the main causes of maternal mortality are preventable complications that occur during pregnancy, childbirth and the puerperium.

Integrality is a constitutional right and guiding principle in the creation of the National Women's Health Policy, which aims to ensure that care occurs at all stages of women's lives, promoting an articulation between health promotion, prevention and recovery actions. [3]

Bearing in mind that the main causes of death in women come from diseases of the pregnancy-puerperal cycle and complications from pre-existing conditions during pregnancy, leaving obstetric causes in focus in the first place in the mortality ranking, it is essential to guarantee access to the ICU so that it is possible to offer quality care at all levels of complexity. [11, 21]

According to the Pan American Health Organization (PAHO)/World Health Organization (WHO), the main causes of maternal mortality are preventable complications that occur during pregnancy, childbirth and the puerperium. Hypertensive syndromes and their complications (pre-eclampsia, eclampsia and HELLP) make up the main causes of maternal mortality, followed by severe bleeding (especially after childbirth), infections (usually after childbirth), complications during childbirth, and unsafe abortions. [9]

To ensure comprehensive care, in June 2013, the Hospital Materno Infantil de Brasília (HMIB) inaugurated the first Maternal ICU of the public health network of the Federal District, with ten beds intended for the exclusive care of this public. [22]

In view of the practical scenario of the maternal ICU, the importance of collecting epidemiological and clinical data was observed to verify whether they are in line with the WHO indices, in addition to providing information to promote interventions that directly impact the care provided by health professionals. The general objective of the present study was to characterize the profile of patients referred to the maternal ICU of a public hospital in the Federal District.

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METHOD

This is a quantitative, descriptive, cross-sectional and analytical study, based on retrospective secondary data, obtained from the HMIB maternal ICU admissions book. The HMIB is a public hospital with care for children and women that offers services of various complexities, including the maternal ICU, which is part of the Action Plan of the Stork Network of the Federal District.

The sample consisted of 701 patients hospitalized during the periods from June 2013 to June 2014 and June 2019 to June 2020 in order to compare the periods. Data collection was carried out between February 1st and 5th, 2022, and patients who did not have their complete registration in the admission book were excluded from the study.

The collected data were organized in a spreadsheet and then analyzed through descriptive statistics, through frequencies and averages.

This study complied with CNS Resolution 466/2012 and was approved by the CEP of the Health Sciences Teaching and Research Foundation (FEPECS) with opinion No. 5,217,284.

RESULTS

From June 2013 to June 2014, 296 admissions were recorded, with an average age of 31.93 years, with a minimum of 14 and a maximum of 86 years. Between June 2019 and June 2020, 405 hospitalizations were recorded, with an age range between 15 and 81 years and a mean of 29.13 years. The prevailing general age group is between 20 and 29 years old (40.66%) as shown in Table 1.

Regarding the length of stay, in the period from 2013 to 2014 the average was 7.43 days, ranging from 1 to 707 days. In the period from 2019 to 2020, the average was 3.97 days, ranging from 14 hours to 128 days. The average between the two analyzed periods was 5.41 days.

It was found that in the periods of June/13-14 and June/19-20 the origin of admissions (Table 2) are from the hospital under study, with about 75% and 61.23% respectively.

Table 1. Distribution of the age variable according to age group and comparison between the periods verified in the study. Brasília-DF, Brazil, 2022.

Age (years)	June/13 to july/14 N (%)	June/19 to June/20 N (%)	General N (%)	Comparative N (%)
14-19	28 (9,46%)	50 (12,35%)	78 (11,13%)	30 (+78,57%)
20-29	115 (38,85%)	170 (41,98%)	285 (40,66%)	55 (+47,83%)
30-39	106 (35,81%)	157 (38,77 %)	263 (37,52%)	51 (+48,11%)
40-49	25 (8,45%)	23(5,68%)	48 (6,85%)	-2 (-8%)
50-59	7 (2,36%)	2 (0,49%)	9 (1,28%)	-7 (-71,43%)
60 or more	15 (5,07%)	3 (0,74%)	18 (2,57%)	-12 (-80%)
Total	296	405	701	109 (+36,82%)

Source: Authors' database, 2022.

Table 2. Origin of the population hospitalized in the ICU and comparison between the periods verified in the study. Brasília-DF, Brazil, 2022.

Origin	June/13 to july/14 N (%)	June/19 to June/20 N (%)	General N (%)	Comparative N (%)
HMIB	222 (75%)	248 (61,23%)	470 (67,05%)	26 (+11,71%)
HRAN	9 (3,04%)	7 (1,73%)	16 (2,28%)	-2 (-22,22%)
IHB-DF	3 (1,01%)	1 (0,25%)	4 (0,57%)	-2 (-66,67%)
HRPA	6 (2,03%)	16 (3,95%)	22 (3,14%)	10 (+166,67%)
HRPL	3 (1,01%)	11 (2,72%)	14 (2,00%)	8 (+366,67%)
HRS	8 (2,70%)	21 (5,19 %)	29 (4,14%)	(2+62,50%)
HUB	9 (3,04%)	2 (0,49%)	11 (1,57%)	-7 (-77,78%)
HRC	12 (4,05%)	13 (3,21%)	25 (3,57%)	1 (+8,33%)
HRT	4 (1,35%)	32 (7,90%)	36 (5,14%)	28 (+800%)
HRSAM	2 (0,68%)	5 (1,23%)	7 (1,00%)	3 (+150%)
HRG	9 (3,04%)	3 (0,74%)	12 (1,71%)	-6 (-66,67%)
HRSM	5 (1,69%)	43 (10,62%)	48 (6,85%)	37 (+760%)
HRBz	2 (0,68%)	2 (0,49%)	4 (0,57%)	0%
Rede particular	1 (0,34%)	1 (0,25%)	2 (0,29%)	0%
UPAs	1 (0,34%)	0	1 (0,14%)	-1 (-100%)

Caption: HMIB: Hospital Materno Infantil de Brasília; HRAN: Asa Norte Regional Hospital; IHB-DF: Base Hospital Institute of the Federal District; HRPA: Regional Hospital of Paranoá; HRPL: Planaltina Regional Hospital; HRS: Sobradinho Regional Hospital; HUB: University Hospital of Brasília; HRC: Ceilândia Regional Hospital; HRT: Taguatinga Regional Hospital; HRSAM: Hospital Regional da Samambaia; HRG: Hospital Regional do Gama; HRSM: Santa Maria Regional Hospital; HRBz: Regional Hospital of Brazlândia; UPAS: Emergency Care Units

Source: Authors' database, 2022.

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With regard to diagnosis, the most recurrent are the exclusive hypertensive syndromes of pregnancy (severe preeclampsia, eclampsia and HELLP syndrome), followed by hemorrhagic shock, sepsis, heart disease, Sickle Cell Anemia, Diabetes Mellitus, Acute Respiratory Infections and Urinary Infection (Table 3).

Regarding the outcome (Table 4), the treatment follow-up at the Polyclinic (38.94%) was predominant, followed by transfer to another public hospital (23.11%) and referral to the rooming-in (19.54%) of the hospital under study.

With regard to the number of deaths, there was a significant increase in records. In the period from 2013 to 2014, 1 death was recorded, in the period from 2019-2020, 5 deaths were recorded. Among the causes of death, there were HELLP Syndrome (38 years old), Eclampsia (34 years old), Heart disease (50 years old), Acute pulmonary edema (41 years old) and Sepsis (37 years old).

Table 3. Distribution of the main diagnoses treated in the ICU and comparison between the periods verified in the study. Brasília-DF, Brazil, 2022.2.

Diagnostics	June/13 to july/14 N (%)	June/19 to June/20 N (%)	General N (%)	Comparative (%)
Severe Pre-eclampsia	30 (10,14%)	90 (22,22%)	120 (17,12%)	200,00%
Eclampsia	6 (2,03%)	15 (3,70%)	21 (3,00%)	150,00%
HELLP syndrome	26 (8,78%)	30 (7,41%)	56 (7,99%)	15,38%
Unspecified PSHS	55 (18,58%)	23 (5,68%)	78 (11,13%)	-58,18%
SAH	5 (1,69%)	7 (1,73%)	12 (1,71%)	40,00%
HD	34 (11,49%)	45 (11,11%)	79 (11,27%)	32,35%
Urinary infection	7 (2,36%)	14 (3,46%)	21 (3,00%)	100,00%
Epilepsy and HIs	6 (2,03%)	5 (1,23%)	11 (1,57%)	-16,67%
ARFs	8 (2,70%)	16 (3,95%)	24 (3,42%)	100,00%
Puerperal Infection	7 (2,36%)	2 (0,49%)	9 (1,28%)	-71,43%
Sepsis	2 (0,68%)	23 (5,68%)	25 (3,57%)	1050,00%
Hemorrhagic Shock	9 (3,04%)	30 (7,41%)	39 (5,56%)	233,33%
Sickle cell anemia	3 (1,01%)	14 (3,46%)	17 (2,43%)	366,67%
Gestational DM	5 (1,69%)	15 (3,70%)	20 (2,85%)	200,00%
DVT/PTE	7 (2,36%)	10 (2,47%)	17 (2,43%)	42,86%
Hysterectomy	32 (10,81%)	7 (1,73%)	39 (5,56%)	-78,13%
Others	54 (18,24%)	59 (14,57%)	113 (16,12%)	9,26%

Caption: HD = heart disease; PSHS = Pregnancy Specific Hypertensive Syndrome; SAH = systemic arterial hypertension; HIs = Head Injuries; ARFs = Acute Respiratory Failures; DM = Diabetes Mellitus; DVT = Deep Vein Thrombosis; PTE = Pulmonary thromboembolism.

Source: Authors' database, 2022.

Table 4. Distribution of outcomes of patients admitted to the ICU and comparison between the periods verified in the study. Brasília - DF, Brazil, 2022.

Variables	June/13 to july/14 N (%)	June/19 to June/20 N (%)	General N (%)	Comparative (%)
Transfer to another public hospital	47 (15,88%)	115 (28,40%)	162 (23,11%)	144,68%
Transfer to Private Hospital	3 (1,01%)	0	3 (0,43%)	-100,00%
Joint Housing (HMIB)	59 (19,93%)	78 (19,29%)	137 (19,54%)	32,20%
High Risk Sector (HMIB)	40 (13,51%)	61 (15,06%)	101 (14,41%)	52,50%
Polyclinic (HMIB)	139 (46,96%)	134 (33,09%)	273 (38,94%)	-3,60%
Death	1 (0,34%)	5 (1,23%)	6 (0,86%)	400,00%
Discharge to home	1 (0,34%)	1 (0,25%)	2 (0,29%)	0,00%
UCIN (HMIB)	4 (1,35%)	7 (1,73%)	11 (1,57%)	75,00%
Evasion	0	1 (0,25%)	1 (0,14%)	100%
Obstetric Center - HMIB	2 (0,68%)	3 (0,74%)	5 (0,71%)	50,00%

Source: Authors' database, 2022.

DISCUSSION

As for the age variable, the data from this study were in line with the results of a survey carried out in an ICU in the city of Fortaleza-CE, with the age range of admissions for obstetric complications being between 20 and 29 years. [11]

The high rates of maternal mortality were recorded in this age group due to obstetric causes, data that corroborate the data found in this study. [14,24] A survey on maternal deaths carried out at a Public Maternity Hospital in Fortaleza showed a prevalence between 20 and 34 years of age. [9]

Most ICU admissions were patients from the hospital studied (67.05%). It should be noted that the hospital under study is the only one in the Health Care Network of the Federal District that has a specific ICU

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for maternal health care, which justifies the hospitalization of patients from other administrative regions, including the cities of Goiás that are in the vicinity of the DF. [22]

Most ICU admissions were patients from the hospital studied (67.05%). It should be noted that the hospital under study is the only one in the Health Care Network of the Federal District that has a specific ICU for maternal health care, which justifies the hospitalization of patients from other administrative regions, including the cities of Goiás that are in the vicinity of the DF. [5, 11, 13, 24]

Regarding direct obstetric causes, it was observed that Hypertensive Syndromes were the priority diagnosis. Preeclampsia (17.12%) was the main one, followed by Pregnancy Exclusive Hypertensive Syndrome - unspecified (11.13%), Hellp Syndrome (7.99%) and Eclampsia (3%), which if associated, account for 39.23% of hospitalization cases. Another important data was the hemorrhagic shock that makes up the severe obstetric hemorrhages with 5.56% of the cases. The data corroborate a research carried out in an ICU in Ceará, which found Eclampsia, Hellp Syndrome and Severe Preeclampsia as the main causes of hospitalization. [9, 10, 11]

Hypertensive syndromes and severe pregnancy hemorrhages are the main causes of maternal death worldwide. In this research, the data show that direct obstetric causes are the main reason for ICU admission, data that are in line with other studies. [5, 6, 17,18]

As indirect causes, other diagnoses prevailed (16.12%) that include endemic, seasonal diseases and isolated diagnoses that had a small number of cases, such as: H1N1, Dengue, Thyroid Diseases, Acute Abdomen, among others, followed by Heart Diseases (11.27%). Some variables of hospitalization for indirect causes evidenced in this research are not in agreement with other studies. [13, 24]

It was also observed that, although to a lesser extent, the indirect causes of hospitalization evidenced in this study, such as: Heart Diseases, Acute Respiratory Failures (ARFs) and Sepsis, are in agreement with data found in other studies. [6, 11]

A study carried out in an Obstetric ICU in the Northeast of Brazil showed that 66.8% of hospitalizations were due to non-obstetric causes, evidencing the diagnoses of heart disease, deep vein thrombosis (DVT), urinary tract infection (UTI) as the main causes of hospitalization, data that were also found in this research to a lesser extent. [6]

The length of stay was on average 5.41 days. This data is in line with the average length of stay in other surveys. 5, 11 Although, the length of stay in the ICU is a variable data, as can be seen in other studies that had a length of stay longer than this. [6, 18]

Regarding the outcome of hospitalizations, the research showed that most patients followed treatment in other sectors of the hospital, totaling 75.18% of hospitalization outcomes. It was observed that the amount recorded in this study was lower than in other studies that showed a variation between 77% and 92.6%. [5, 11]

Regarding the number of deaths, this study presented a percentage of 0.86%, which is lower than the variation found in other studies that showed rates of 4% and 7.3%.[5, 6, 11]

Reducing maternal mortality rates and promoting women's health at all stages of life are defined as goals in the Sustainable Development Goals and in the 2030 Agenda of the United Nations - UN. [17]

Several factors make the Maternal Mortality Ratio (MMR) values high, and they are mostly associated with the puerperal pregnancy cycle and most maternal deaths are preventable, provided that women received adequate assistance from family planning, and assistance to prenatal care, childbirth and puerperium. [5, 13, 17]

CONCLUSION

This study made it possible to know and characterize the population of women treated at the ICU of the HMIB, being the first step to help identify the factors related to these hospitalizations. The data showed that there is a higher prevalence of the age group between 20 and 29 years of age, with an average of 30.27 years of age. The prevalent diagnosis was Preeclampsia (17.12%), followed by Unspecified Pregnancy Specific Hypertensive Syndrome (PSHS) (11.13%) and Heart Disease (11.27%).

The outcome of hospitalizations was treatment follow-up at the Polyclinic (38.94%) of the hospital in question, followed by transfers to another hospital in the DF Public Network (23.11%). The death rate of the years studied comprised 0.86% of the outcomes.

The research had limitations due to the lack of data filling in the admission book, such as age, length of stay and outcome, which are necessary variables to carry out the study.

We emphasize the importance of filling out the admission form completely, as these data may be useful to support research, in addition to contributing to the elucidation of the profile of patients who need care in the Maternal ICU in the DF. With this, it is expected that the results of this study can support measures that will minimize the factors that lead to the hospitalization of patients, and improve the quality of care received during pregnancy, childbirth and the puerperium.

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References

1.BRASIL, M. DA S. Política Nacional de Atenção Integral à Saúde da Mulher Princípios e Diretrizes. [s.l: s.n.]. v. 106

2.Brasil. Presidência da República. Secretaria de Políticas para as Mulheres. Plano Nacional de Políticas para as Mulheres. Brasília: Secretaria de Políticas para as Mulheres, 2013. 114 p.: il

3.Coelho EAC, Silva CTO, Oliveira JF, Almeida MS. Integralidade do cuidado à saúde da mulher: limites da prática profissional. Esc Anna Nery Rev Enferm; 2009; 13 (1): 154-160. https://doi.org/10.1590/S1414-81452009000100021

4.Coelho MAL, Katz L, Coutinho I, Hofmann A, Miranda L, Amorim M. Perfil de mulheres admitidas em uma UTI obstétrica por causas não obstétricas. Rev Assoc Med Bras. 2012; 58(2):160-167. https://doi.org/10.1590/S0104-42302012000200011

5.Dell Agnolo CM, Gravena AAF, Romeiro-Lopes TC, Rocha-Brischiliari SC. Mulheres em idade fértil: causas de internação em Unidade de Terapia Intensiva e resultados. ABCS health sci; 2014; 39(2): 77-82. DOI: https://doi.org/10.7322/abcshs.v39i2.626

6.FINANCEIRO, S. et al. Perfil de mulheres admitidas em uma uti obstétrica Por causas não obstétricas ARTIGO ORIGINAL Perfil de mulheres admitidas em uma UTI obstétrica por causas não obstétricasRev Assoc Med Bras. [s.l: s.n.].

7.GOMES, N. L. et al. Monitoramento e Acompanhamento da Política Nacional de Atenção Integral à Saúde da Mulher (PNAISM) e do Plano Nacional de Políticas para as Mulheres 2013-2015 (PNPM). Brasília-DF: [s.n.].

8.Gouveia GS, Lessa GM. Conhecimento da gestante e direitos assegurados pela Rede Cegonha: contribuição gestora. Rev. baiana saúde pública. 2019; 43: 138-151.

9.Herculano MMS, Veloso LS, Teles LMR, Oriá MOB, Almeida PC, Damsceno AKC. Óbitos maternos em uma maternidade pública de Fortaleza: um estudo epidemiológico. Rev Esc Enferm USP. 2012; 46(2):295-301. https://doi.org/10.1590/S0080-62342012000200005

10.LIMA, M. R. G. DE et al. Alterações maternas e desfecho gravídico-puerperal na ocorrência de óbito materno. Cadernos Saúde Coletiva, v. 25, n. 3, p. 324–331, 28 set. 2017. https://doi.org/10.1590/1414-462X201700030057

11.Luana Feitosa Mourão LF, Mendes IC, Marques ADB, Cestari VRF, Braga RMBB. Ingresos en UCI por causas obstétricas. Enfermería Global. 2018; 18(1): 304-345. https://doi.org/10.6018/eglobal.18.1.302341

12.MEDEIROS, P. F. DE; GUARESCHI, N. M. DE F. Políticas públicas de saúde da mulher: a integralidade em questão. Revista Estudos Feministas, v. 17, n. 1, p. 31–48, abr. 2009.

13.Mendonça IM, Silva JBF, Conceição JFF, Fonseca SC, Boschi-Pinto C. Tendência da mortalidade materna no Estado do Rio de Janeiro, Brasil, entre 2006 e 2018, segundo a classificação CID-MM. Cad. Saúde Pública 2022; 38(3): 1-15. https://doi.org/10.1590/0102-311X00195821

14.MENEZE, MLN, BEZERRA JFO, BEZERRA JFO. Epidemiological profile of maternal deaths in a referral hospital for high-risk pregnancy. Ver. Rene. 2015;16(5): 714-721. DOI: 10.15253/2175-6783.2015000500013

15.Ministério da Saúde (Brasil). Política Nacional de Atenção Integral à Saúde da Mulher Princípios e Diretrizes. Ministério da Saúde. Brasília: MS, 2004. Disponível em: <https://conselho.saude.gov.br/ultimas_noticias/2007/politica_mulher.pdf> Acesso 20 jun 2022.

16.Ministério da Saúde (Brasil). Portaria No 1.459, de 24 de junho de 2011. Institui, no âmbito do Sistema Único de Saúde - SUS - a Rede Cegonha. Diário Oficial da União 25 jun 2011;Seção 1.

17.MOTTA CT, MOREIRA MR. Will brazil comply with the sdg 3.1 of the 2030 agenda? an analysis of maternal mortality, from 1996 to 2018. Ciênc. Saúde Colet. 2021; 26(10):4397-4409. https://doi.org/10.1590/1413-812320212610.10752021

18.Oliveira LC, Costa AAR. Maternal near miss in the intensive care unit: clinical and epidemiological aspects. Rev Bras Ter Intensiva. 2015; 27(3):220-227. DOI: 10.5935/0103-507X.20150033

19.Organização Mundial de Saúde. Estrategia Mundial para la Salud de la Mujer, el Niño y el Adolescente (2016-2030). Todas las Mujeres, Todos los Niños. Geneva: WHO; 2016.

20.Osis MJMD. Paism: um marco na abordagem da saúde reprodutiva no Brasil. Cad. Saúde Pública. 1998; 14(Supl 1).

21.Resende LV, Rodrigues RN, Fonseca MC. Mortes maternas em Belo Horizonte, Brasil: percepções sobre qualidade da assistência e evitabilidade. Rev Panam Salud Publica. 2015;37(4/5):218–224

22.Secretaria de Saúde do Distrito Federal. (06 de 06 de 2013). Fonte: https://www.saude.df.gov.br/: https://www.saude.df.gov.br/w/hmib-ganha-primeira-uti-materna-do-df Acesso em: 20 de mai. De 2022

23.SILVA, L. N. DA; SILVEIRA, S. DE F. R. Políticas públicas de saúde para a mulher no brasil: uma análise das conquistas. VII Encontro Brasileiro de Administração Pública, v. ISSN: 2594-5688, p. 1–16, nov. 2020. Silva LN, Silveira SFR. Políticas públicas de saúde para a mulher no brasil: uma análise das conquistas. [Apresentação no VII Encontro Brasileiro de Administração Pública; 2020 nov 11-13; Brasília, Brasil].

24.Tintori JA, Mendes LM, Monteiro JC, Gomes-Sponholz F. Epidemiologia da morte materna e o desafio da qualificação da assistência. Acta Paul Enferm. 2022;35:eAPE00251. . https://doi.org/10.37689/acta-ape/2022AO00251

DOI: https://doi.org/10.36489/nursing.2022v25i291p8352-8363