



MOTHERHOOD IN PRISON REGIME: MATERNAL AND NEONATAL OUTCOMES

MATERNIDADE EM REGIME PRISIONAL: DESFECHOS MATERNOS E NEONATAIS

LA MATERNIDAD EN RÉGIMEN PENITENCIARIO: LOS RESULTADOS MATERNOS Y NEONATALES

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ABSTRACT

Objective: to describe the outcomes identified in the literature on pregnancy, childbirth and the puerperium in women deprived of their liberty. **Method:** integrative review of scientific articles published from 2007 to 2017, in the databases Medline, Web of Science, LILACS and SciELO virtual library, using the following descriptors: “Prison” (“Pregnancy” OR “Parturition” OR “Postpartum Period”), critically reading the abstracts and full texts in data analysis, selecting 12 articles. **Results:** the effective pre-natal follow-up is reality only in developed countries; the communication failure between the prison system and family of pregnant and puerperal women and the use of handcuffs during labor and childbirth are weaknesses in the assistance to this population share. Main characteristics: more incidence of vaginal deliveries, development of complications such as hypertension and puerperal infection, difficulties establishing the link between mother and baby, mainly in breastfeeding. **Conclusion:** the described outcomes show the weaknesses that permeate the care to this population. The results reaffirm the need for improvements in care and subsidize the development of researches interested in exploring the relationships between prison regime and pregnancy-puerperal cycle. **Descriptors:** Public Health; Obstetric Nursing; Prison; Pregnancy; Parturition; Postpartum Period.

RESUMO

Objetivo: descrever os desfechos, identificados na literatura, da gestação, parto e puerpério em mulheres privadas de liberdade. **Método:** revisão integrativa de artigos científicos publicados entre 2007 a 2017, nas bases de dados Medline, Web of Science, LILACS e biblioteca virtual SciELO, utilizou-se os seguintes descritores: “Prisão” (“Gravidez” OR “Parto” OR “Período pós-parto”), realizou-se a leitura crítica dos resumos e textos completos na análise dos dados, ao final selecionou-se 12 artigos. **Resultados:** o acompanhamento pré-natal efetivo é realidade apenas em países desenvolvidos; a falha na comunicação entre o sistema prisional e familiares de gestantes e puérperas, o uso de algemas durante o trabalho de parto e parto, são fragilidades na assistência à esta parcela populacional. Destacam-se: mais incidência de partos vaginais, o desenvolvimento de complicações como a hipertensão e infecção puerperal, dificuldades para o estabelecimento do vínculo mãe-bebê, principalmente na amamentação. **Conclusão:** os desfechos descritos mostram as fragilidades que permeiam a assistência à esta parcela populacional. Os resultados reafirmam a necessidade de melhorias na assistência e subsidiam o desenvolvimento de pesquisas interessadas em explorar as relações entre o regime prisional e o ciclo gravídico-puerperal. **Descritores:** Saúde Pública; Enfermagem Obstétrica; Prisão; Gravidez; Parto; Período Pós-Parto.

RESUMEN

Objetivo: describir los resultados identificados en la literatura, el embarazo, el parto y el puerperio en mujeres privadas de libertad. **Método:** revisión integrativa de artículos científicos publicados entre 2007 y 2017, las bases de datos Medline, Web of Science, LILACS y SciELO biblioteca virtual, utilizándose los siguientes descriptors: “Cárcel” (“Embarazo” OR “Parto” OR “Período Posparto”), realizándose la lectura crítica de los resúmenes y los textos completos en el análisis de datos, seleccionándose 12 artículos. **Resultados:** el seguimiento prenatal efectivo es realidad sólo en los países desarrollados; la falla de comunicación entre el sistema penitenciario y la familia de mujeres embarazadas y puérperas, el uso de esposas durante el trabajo de parto y el parto, son las deficiencias en la asistencia a esta población. Características destacadas: mayor incidencia de partos vaginales, el desarrollo de las complicaciones como la hipertensión y la infección puerperal, dificultades para el establecimiento del vínculo entre la madre y el bebé, principalmente durante la lactancia. **Conclusión:** los resultados muestran las debilidades que impregnan la cuota de asistencia a esta población. Los resultados reafirman la necesidad de mejoras en la atención y subvencionar el desarrollo de investigaciones interesadas en explorar las relaciones entre el régimen penitenciario y el ciclo embarazo-puerperal. **Descritores:** Salud Publica; Enfermería obstétrica; Prisiones; Embarazo; Parto; Período Posparto.

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INTRODUCTION

The prison population grows sharply throughout the world. In the American continent, the total number of arrests increased by 40% since 2000, the highest rates from South American countries. The female population in prison regime grows in a greater proportion than males in all continents.¹

Brazil is characterized as the Latin American country with the highest percentage of women in prison regime. Some of the main reasons for women’s insertion in prison regime are theft and crimes related to drug trafficking.^{2,3}

Most women deprived of their liberty have low income and schooling, are in fertile age, with little family support, belong to socially vulnerable group, aggravated from the moment they are introduced in prison.⁴

Among the women who make up the prison regime, there are pregnant and puerperal women, whose pregnancy may have been identified before or during the stay in prison. These women have the right to differentiated and appropriate healthcare for the gravid-puerperal situation, by means of the women’s health attention policy, more specifically through the creation of the *Rede Cegonha*. All pregnant women in prison regime has the right to adequate monitoring during prenatal care, childbirth, puerperium and child health for the first 24 months of life.⁵

Although they experience a unique moment, these women are neglected by the Brazilian healthcare system.⁶ The poor implementation of the *Rede Cegonha* in the prison system can generate risk factors for the development of complications during pregnancy, parturition and childbirth.⁷ This scenario causes social repercussions, arising from the care that will be necessary for these women’s children and themselves, as well as the health system itself, which may be overloaded with new demands arising from this population, caused by improper care.

Some studies demonstrate the concern with the theme of motherhood in the prison system, however, it is still a dispersed and incipient issue.^{6,7}

OBJECTIVE

- To describe the outcomes identified in the literature on pregnancy, childbirth and puerperium in women deprived of their liberty.

METHOD

This study was developed through the following adapted steps: 1) choice and

definition of the theme and objective, with the following formulated research question: “What are the outcomes of pregnancy and puerperium in prison regime?” 2) establishment of the inclusion criteria and search in the literature, 3) organization of the studies information, 4) assessment of the studies included in the review, 5) data interpretation and discussion, 6) knowledge summary and presentation of the review.⁸

The inclusion criteria were studies discussing pregnancy and puerperium in prison regime, that responded the research question, published from 2007 to 2017; there were no language restrictions.

The period delimitation occurred due to the small amount of studies prior to 2007, as well as their non-fulfilment of the requirements of this research, besides the increased rate of women inserted into the prison regime in the last ten years.

The following terms from the Medical Subject Headings (MeSH) in English were used: “Prisons” AND (“Pregnancy” OR “Parturition” OR “Postpartum period”) in the databases MEDLINE and Web of Science; and the Health Sciences Descriptors (DeCS) in Portuguese: “*Prisão*” (“*Gravidez*” OR “*Parto*” OR “*Período pós-parto*”) in the Latin American and Caribbean Literature in Health Sciences (LILACS) and virtual library Scientific Electronic Library Online (SciELO).

Initially, the titles of scientific articles found were analyzed, with the selection of those that approached the objective of this research, subsequently submitted to critical and exploratory reading of abstracts, observing the inclusion criteria. The texts of the selected articles that responded the guiding question were fully read.

The following variables were used for data collection, for registration: authors, year of publication, country of origin of the study, language, study design, population and sample, instruments used in data collection and pregnancy, childbirth, puerperium and neonatal outcomes.

The articles were classified according to the level of scientific evidence (LE), namely: level I: systematic reviews and meta-analyses, level II: controlled randomized study, level III1: controlled, non-randomization, well-delineated study, level III2: well-delineated cohort study, analytical study, case-control, level III3: multiple temporal series, level IV: descriptive and qualitative studies.⁹ The final sample of articles was analyzed based on answers to the question and the objective of this research.

After the searches in databases and virtual library, analysis of found productions, from the 146 retrieved articles, only 12 scientific articles were selected for the final analysis of this study. The figure below represents this research.

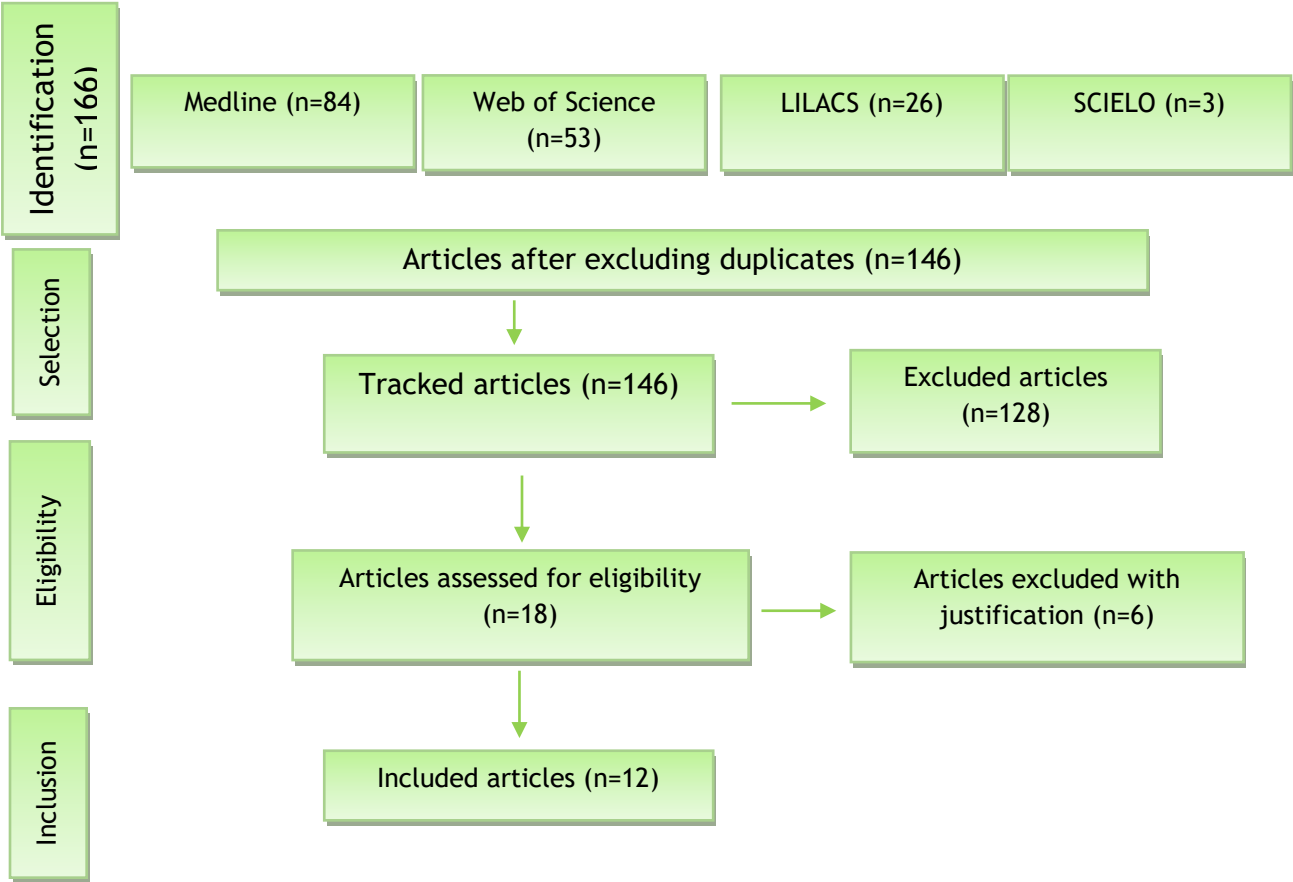


Figure 1. Flowchart of search in databases and virtual library, according to the stages of research. Manaus (AM), Brazil, 2018.

Six articles were excluded by indirectly addressing the topic, taking into account only budgets of the physical environment in prisons, the establishment of computerized systems for the registration of pregnant and puerperal women, as well as the authors' opinions on other articles related to the theme, not describing maternal and/or neonatal outcomes.

RESULTS

Table 1 shows the general characteristics of studies: authors, year of publication, country of origin, study design and level of scientific evidence. Almost all studies are qualitative and with evidence level IV.

Table 1. Characterization of the studies on pregnancies and puerperium in prison regime. Manaus (AM), Brazil, 2018.

Year	Authors	Country of origin	Language	Study design	LE
2008	Howard et al.	United States	English	Cross-sectional	IV
2008	Hutchinson et al.	United States	English	Phenomenological/ Quali-Quantitative	IV
2009	Howard et al.	United States	English	Cross-sectional	IV
2010	Tanner.	United States	English	Descriptive/ Quantitative	IV
2011	Howard et al	United States	English	Cross-sectional	IV
2012	Huang; Atlas; Parvez	United States	English	Descriptive/ Qualitative	IV
2014	Pícoli et al.	Brazil	Portuguese	Descriptive/ Cross-sectional	IV
2014	Walker et al.	Australia	English	Cohort, retrospective	III2
2016	Fritz; Whiteacre.	United States	English	Qualitative	IV
2016	Leal et al.	Brazil	Portuguese	Descriptive/Quantitative	IV
2016	Lopes; Pinheiro.	Brazil	Portuguese	Phenomenological/Qualitative	IV
2016	Matão et al.	Brazil	Portuguese	Descriptive/ Qualitative	IV

Table 2 shows the continuity of the characterization of the studies, with study site, population, sample and instruments used in data collection. Only five studies consulted

secondary sources for obtaining data, such as electronic medical records, both in the hospitals as in the prison system.¹⁰⁻¹⁴

Table 2. Characterization of the studies according to study site, population, sample and data collection instruments. Manaus (AM), Brazil, 2018.

Authors	Study site	Population	Sample (n)	Data instrument	collection
Howard et al.	Texas State Prison	Pregnant women	147	Electronic records; childbirth records and child protection service	
Hutchinson et al.	Correction institution in a Southeastern city	Pregnant women	25	Semi-structured questionnaire	
Howard et al.	Texas State Prison	Neonates of female inmates	360	Electronic records; childbirth records and child protection service	
Tanner.	Indiana Women's Prison	Pregnant women who gave birth in the last 4 years	200	Local hospital data	
Howard et al.	Texas State Prison	Neonates of female inmates	360	Electronic records; childbirth records and child protection service	
Huang; Atlas; Parvez.	New York City Prison	Pregnant women	20	Semi-structured interview	
Picoli et al.	Female prison in Mato Grosso do Sul	Pregnant and puerperal women	12	Structured questionnaire	
Walker et al.	Correctional service in New South Wales	Female inmates and general population, aged 18-44, who gave birth between 2000 and 2006	4,361	Correction and health service information	
Fritz; Whiteacre.	Indiana Women's Prison	Women assisted in childbirth during prison	27	Semi-structured interview	
Leal et al.	Female prison of capital and metropolitan regions of Brazil	Female population living with their children in prisons	495	Electronic forms	
Lopes; Pinheiro.	Reference Center for Pregnant Women and Hospital in Belo Horizonte	Women deprived of their liberty; penitentiary agents; directors of institutions and health professionals	9	Semi-structured interview	
Matão et al.	Women's Penitentiary in Goiania	Puerperas and employees of the prison system	9	Socioeconomic form; semi-structured questionnaire	

Table 3 describes the studies, the main outcomes in pregnancy, parturition, puerperium and neonatal care. Women entering the prison regime have low schooling and multiparity, abuse of substances, mainly tobacco, lack of information, such as the use of condoms and infection by sexually transmitted infections (STI).^{6,15}

In prenatal (PN) follow-up, in international prison regime, there is the early identification of pregnant women.^{12,14} Higher percentage of consultations among pregnant women younger than 20 years, primiparous women, entering the prison regime during the first trimester of pregnancy.¹² In Brazil, there was low percentage of consultations and PN and postpartum guidance.^{6,15,16} There was constant absence of professionals, humanization and negligence in providing guidelines.^{16,17}

In labor and obstetric delivery, there are failures of communication between the team of the prison system and the relatives of the pregnant women.^{6,19} There is verbal and psychological violence by health professionals and prison officers.^{6,16,18} As maternal complications, pre-eclampsia, early placenta previa, early amniorrhea, surgical wounds infections, in the case of cesarean

sections.^{13,15} The rates of cesarean sections were in accordance with the estimated values for society in general.¹³⁻¹⁵ The fetuses of pregnant women in prison regime presented a greater chance for admission in intensive care units.¹⁴

In puerperium, women in prison regime are concerned with the mother-baby bond.^{17,19,20} The lack of suitable spaces for the child's development.¹⁷ Postpartum guidelines are among the major deficiencies^{6,20} There is the desire for change of life and reintegration into society.^{19,20}

Table 3. Description of the studies, outcomes during pregnancy, parturition, puerperium and neonatal care. Manaus (AM), Brazil, 2018.

Authors	Outcome			
	Pregnancy	Parturition	Puerperium	Neonatal care
Howard et al.	Low adherence to prenatal care, illicit drug use.	Uninformed	Uninformed	Low birth weight associated with late pregnancy detection
Hutchinson et al.	Fear of weakening the mother-baby bond	Uninformed	The low percentage of visits by children's guardians weakens the bond	Uninformed
Howard et al.	Uninformed	Premature births associated with white and black women	Uninformed	Low birth weight associated with white women
Tanner.	Entering during the 3 rd gestational trimester was associated to the low PN follow-up	The number of cesareans presented a percentage similar to the general population	Complications: pre-eclampsia and eclampsia, surgical wound infections	Low birth weight was lower than the community rate in general
Howard et al.	The mean PN follow-up was 6.7 appointments	Uninformed	Uninformed	Increased birth weight of mothers who were jailed early in pregnancy
Huang; Atlas; Parvez.	Uninformed	Uninformed	Difficulties related to breastfeeding	Uninformed
Pícoli et al.	Complications: hypertension, anemia, early amniorrhea, urinary tract infection and bleeding in the 3 rd trimester	Uninformed	There were no postpartum guidelines	Uninformed
Walker et al.	Less chance of antenatal care, late PN onset	Higher percentage for spontaneous partum labor	Uninformed	Increased chance for admission to intensive care units
Fritz; Whiteacre.	PN was negative for both groups	Restrictions on partum labor and obstetric delivery	Pre-WON group: difficulties breastfeeding and binomial separation	Uninformed
Leal et al.	Almost 90% of women were already pregnant when they were arrested	Delayed time for medical care, higher rate of vaginal delivery, low percentage of partners	Uninformed	Uninformed
Lopes; Pinheiro.	Uninformed	The restricted use of handcuffs generated privacy and self-confidence	Uninformed	Uninformed
Matão et al.	Uninformed	Uninformed	Breastfeeding and bond damaged by the prison environment	Precarious healthcare for children

The results originated the following themes: “prenatal and puerperal care”, “maternal and neonatal effects”, “mother-baby bond”, discussed below.

DISCUSSION

◆ Prenatal and puerperal care

In the international context, the penitentiary system is better prepared to assist pregnant women’s health, overcoming the vulnerabilities in their environment of origin, through PN and puerperium follow-up, when compared to the Brazilian prison system. In Brazil, the penitentiary is an inadequate environment for developing a pregnancy, once the provided healthcare is

below the recommendations of public health policies.²¹ It refers to the importance of restructuring the prison environment, in order to consider the maternal-fetal binomial during the execution of the sentence, as well as the development of the reproductive planning geared to women deprived of their liberty.

The pregnancy-puerperal cycle consists of biopsychosocial changes that should be considered. The absence of the bond between the professional and the patient, care focused on procedures, without a sensitive listening, generates a weakened and ineffective healthcare.²² The reception and guidance in healthcare of pregnant and puerperal women

in prison regime are essential aspects in the healthcare practice.

Adherence to the PN is fundamental in the follow-up pregnant women, associated with neonates with adequate weight and low rate of complications in the gravid-puerperal cycle.^{12,13} Multiparity, absence of family support and obstetric complications, as well as the social vulnerability, are important risk factors for non-adherence to the PN.²³ The development of health education focused on the importance of the PN and its respective benefits assist in adherence to follow-up, with the consequent promotion of maternal and neonatal health.

The early enrollment of pregnant women to start and continuity of monitoring PN is fundamental for promoting maternal and neonatal health, since women deprived of their liberty receive late assistance, usually after the first quarter.^{6,10,15,18} However, the association between PN, low birth weight and prematurity are already established.^{10,11} Therefore, the prison system needs to have this monitoring in order to prevent deleterious consequences in the child's life, and the consequent impairment to society.

◆ Maternal and neonatal effects

Although the Brazilian prison system is in deterioration,²⁴ worldwide, the communication bonds between the prison regime and the inmates' relatives are fragile. The absence of family support, during maternity, hinders the process. The presence of a companion is fundamental during labor and childbirth, right guaranteed by Federal Law 11,108 of 2005,²⁵ although poorly executed within prisons. The encouragement of pregnant women, greater chances of spontaneous vaginal birth, low rates of epidural anesthesia, as well as reduced rates of cesarean sections, are the main benefits provided by the presence of a companion.²⁶

The exposure to violence of these women when entering healthcare facilities while searching for assistance is a topic that deserves attention and discussion in society in general, because it violates guidelines of the Humanization National Policy of the Unified Health System (*HumanizaSUS*). This factor results from the punitive character of the prison system, especially the Brazilian one, instead of social reintegration of individuals, which collaborates to maltreatment.²⁴ The incorporation of humane care practices to women deprived of their liberty is necessary, in order to collaborate to the rehabilitation process.

The maternal and fetal complications associate to the neglected care throughout

the pregnancy-puerperal cycle. Conditions such as gestational diabetes, pre-eclampsia and infection of the urinary tract,^{13,15} in an adequate PN follow-up, are detected and treated appropriately, reducing risks to maternal-fetal health.²⁷ The work of the *Rede Cegonha*, geared to women deprived of their liberty, is fundamental to promote maternal and neonatal health.

◆ Mother-baby binomial bond

Regarding the binomial bond, the mothers presented a strong adherence, since pregnancy awakens the desire for life change, as well as the need to breastfeed their baby.¹⁷ The binomial separation represents a traumatic condition, for both women due to the fear of suffering new family isolation, as the child, who can show losses in his/her development.^{17,18} Policies strengthening the binomial bond are necessary, in order to bring maternal and neonatal benefits.

The lack of structure of the prison environment to welcome mothers and their newborns are among the main factors that put at risk the binomial bond. The environment poorly planned does not support breastfeeding, or space for the child's proper development.¹⁷ The improvised environment, surrounded by jails, awakens in children anxiety and fear, which configures one of the reasons for mothers to stay away of their children.^{6,17} Restructuring the prison environment proved to be an important factor in the construction of family relations between mothers and children.

Regarding breastfeeding, important both neonatal nutrition as fortification of the mother-baby bond, it is well understood by mothers as fundamental for their children's health.²⁰ The breastfeeding, which, in the community in general, is permeated by difficulties even with guidance and support from professionals, in the prison environment, presents a higher level of difficulty, due to the lack of guidelines.¹⁹ The guarantee of assistance by healthcare professionals trained within the prison regime is important for adherence and continuity in the breastfeeding process.

In the cases of women living with HIV, there is the feeling of helplessness and anxiety, related to the fear of infecting their concept, through either breastfeeding or another form of contact. These women choose to live as least as possible with their children, delegating their care to family members or close friends. They regretted contracting the disease and desired to change their life with their son, after leaving the prison.²⁰ Guidelines for this group, in relation to HIV

and other STI, reproductive planning, tend to guarantee the continuity of the bond with the child and reduced prejudice in relation to their own condition.

As to the limitations, most available studies related to the theme and that responded to the research question showed a low level of scientific evidence, reaffirming the need for developing more detailed and judicious studies with this population and this theme in question.

CONCLUSION

This study described the pregnancy, childbirth and puerperium outcomes of women deprived of their liberty. It discusses the matter mainly in the American continent, although public health policies geared to this population open up for negligence and vulnerability of the health of the incarcerated pregnant women, consequently causing complications such as preterm deliveries and low birth weight in newborns.

The lack of communication of the health team with the pregnant women, of the prison regime with their families has proved to be one of the main causes of dissatisfaction in this moment experienced by these women. Communication is part of the health service welcome to its clients, humanizing the assistance.

There is need to plan and restructure the prison environment, adapting the environment to pregnant women and the binomial, strengthening the bond between both.

The described outcomes show the weaknesses that permeate the health assistance. The results reaffirm the need for improvements in care and subsidize the development of researches interested in exploring the relationships between the prison regime and the pregnancy-puerperal cycle.

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