Hospital admission in high-risk pregnancies: the social representations of pregnant women

Abstract

Background: Hospital admission in high-risk pregnancies changes the routine and the way in which pregnancy is experienced. These changes must be taken into account during care planning and delivery.

Objective: To identify high-risk pregnant women's social representations of hospital admission during pregnancy.

Methodology: An exploratory, descriptive study, guided by the social representations theory, was carried out in two maternity hospitals in Ceará, involving 68 hospitalized high-risk pregnant women, between July and September 2016. The word association test was used and data were analyzed using the Tri-Deux-Mots software, version 5.3.

Results: Pregnancy was represented by the satisfaction to gestate a baby, anchored in the biological and social role of motherhood. High-risk pregnancy was perceived as a problematic situation with an uncertain outcome, surrounded by negative feelings. Hospital admission was interpreted as a place of pain and loneliness, but also of care and protection, expanding the possibilities for a favorable evolution.

Conclusion: The evoked words reflect important meanings attributed to pregnancy in a context of a high-risk pregnancy that requires hospital admission.

Keywords: pregnant women; pregnancy; pregnancy, high-risk; hospitalization; psychology, social

Resumo

Enquadramento: A hospitalização na gravidez de alto risco gera alterações na rotina e na forma de compreender a gravidez, que devem ser consideradas durante o planeamento e execução da assistência.

Objetivo: Conhecer as representações sociais de gestantes de alto risco sobre a hospitalização durante o ciclo gravídico.

Metodologia: Estudo exploratório, descritivo, norteado pela teoria das representações sociais, realizado em duas maternidades do Ceará com 68 gestantes de alto risco hospitalizadas, entre julho e setembro de 2016, através do teste de associação livre de palavras com análise pelo software Tri-Deux-Mots, versão 5.3.

Resultados: A gravidez foi representada pela satisfação gestante, ancorada na função biológica e social da maternidade, a gravidez de alto risco foi apreendida como situação problemática e de desfecho incerto, envolta em sentimentos negativos. A hospitalização foi interpretada como lugar de dor e solidão, mas também de cuidado e proteção, ampliando possibilidades de evolução favorável.

Conclusão: As evocações elucidam conteúdos significativos sobre gravidez com as particularidades do diagnóstico de alto risco e do contexto da hospitalização.

Palavras-chave: gestantes; gravidez; gravidez de alto risco; hospitalização; psicologia social

Resumen

Marco contextual: La hospitalización en los embarazos de alto riesgo provoca cambios en la rutina y en la forma de comprender el embarazo, que deben considerarse durante la planificación y la implementación de la atención.

Objetivo: Conocer las representaciones sociales de las mujeres embarazadas de alto riesgo sobre la hospitalización durante el ciclo de embarazo.

Metodología: Estudio exploratorio y descriptivo, guiado por la teoría de las representaciones sociales, realizado en dos maternidades de Ceará con 68 mujeres embarazadas de alto riesgo hospitalizadas entre julio y septiembre de 2016, mediante la prueba de asociación libre de palabras, analizada con el software Tri-Deux-Mots, versión 5.3.

Resultados: El embarazo se representó por la satisfacción del mismo, anclada en la función biológica y social de la maternidad; el embarazo de alto riesgo se percibió como una situación problemática y de resultado incierto, rodeada de sentimientos negativos. La hospitalización se interpretó como un lugar de dolor y soledad, pero también de cuidado y protección, que amplía las posibilidades de evolución favorable.

Conclusión: Las evocaciones elucidan contenidos significativos sobre el embarazo, con las particularidades del diagnóstico de alto riesgo y del contexto de la hospitalización.

Palabras clave: mujeres embarazadas; embarazo; embarazo de alto riesgo; hospitalización; psicología social
Introduction

Pregnancy is a complex and unique event, characterized by physical, psychological, and social changes; a natural and physiological event that occurs uneventfully for the woman and/or the fetus, with only 20% of the cases being expected to have pregnancy complications. In these cases, referred to as high-risk pregnancies, a wide range of clinical or clinical-obstetric conditions, caused by pregnancy or pre-existing conditions that were aggravated by pregnancy, threaten maternal and fetal well-being and expose them to a higher risk for unfavorable outcomes (Ministério da Saúde, 2012). Although a high-risk pregnancy affects only a small number of women, it has far-reaching effects at epidemiological, emotional, economic, and social levels. High-risk pregnancies are associated with maternal and perinatal morbidity and mortality, as well as with an increase in healthcare costs, due to the need for specialized care, costs with procedures, and hospital admission (Lawn et al., 2016; Martins & Silva, 2018; Moura, Alencar, Silva, & Almeida, 2018). Moreover, high-risk pregnancies are also associated with a variety of negative feelings, such as anxiety, fear, guilt, insecurity, or acceptance issues, which cause vulnerability and emotional instability (Cabral et al., 2018; Wilhelm et al., 2015; Oliveira & Mandú, 2015).

In a high-risk pregnancy, hospital admission is a necessary procedure for pregnancy vigilance and monitoring that is experienced in an intense and particular way by the pregnant women who are removed from their homes and routines into a new environment, where they have contact with other pregnant women and health professionals. This new environment with daily evaluations by the multidisciplinary team, drugs, tests, and procedures, causes stress and adjustment needs (Costa et al., 2019; Piveta, Bernardy, & Sodré, 2016).

In view of the above, it is important to understand how high-risk pregnancies are experienced during hospital admission considering the pregnant women’s social dynamics, how they perceive and interpret life situations, their behaviors, attitudes, choices, values, beliefs, discourses, communication, and meanings attributed to the phenomenon. The Social Representations Theory was the theoretical framework used in this study because it allows understanding individuals in their daily lives, how they process, assimilate, and understand the facts, and how they apply the knowledge built based on these facts in their interactions, communication, and behaviors (Moscovici, 2013).

The Social Representations Theory recognizes the value of the subjective dimension, the individual’s cognitive system, what interferes with the attitudes, knowledge, and behavior towards the object that is represented (Moscovici, 2013). Therefore, this study aimed at identifying high-risk pregnant women’s social representations of hospital admission during pregnancy.

Background

Pregnancy is a dynamic and multidimensional phenomenon for the woman, her partner, and their families due to its clinical, social, cultural, and representational characteristics. In the family universe, it represents a transformation process that is filled with expectations, desires, and insecurities regarding the experience ahead and the assumption of new roles and responsibilities (Cabral et al., 2018).

Although it is a period of healthy experiences, the pregnancy and the postpartum period can be accompanied by clinical, obstetric, and social conditions capable of exposing both mother and fetus to a higher risk for unfavorable outcomes. This is the case of the so-called high-risk pregnancies, which correspond to 20% of all pregnancies in Brazil. Infections, low amniotic fluid, hemorrhage, metabolic and blood pressure alterations are the most common causes (Ministério da Saúde, 2012).

As consequences, the literature reports that they are strongly associated with preterm birth, low birth weight, intrauterine growth restriction, perinatal mortality, admission to maternal and neonatal intensive care units, and maternal mortality, in Brazil and worldwide (Lawn et al., 2016; Martins & Silva, 2018; Moura et al., 2018). Therefore, when pregnant women receive a diagnosis of high-risk pregnancy, they go through a singular and stressful experience due to the risks for both the mother and the child. They experience feelings of guilt, fear, anxiety, and concern, and they can also have difficulties in performing roles established by society and, consequently, experience changes in their routine and quality of life (Costa et al., 2019).

High-risk pregnancies require monitoring of severe cases and readiness to identify problems and intervene in the prevention of possible complications. In this context, the quality of care delivery and the access to specialized health services that meet the users’ needs are essential to the prevention of maternal-fetal morbidity and mortality (Sousa, Sales, Oliveira, & Chagas, 2018).

To ensure the quality of the care delivered to these pregnant women, the Brazilian Ministry of Health developed women care policies such as the Program for Humanization of Prenatal and Childbirth Care, the Woman’s Health Comprehensive Assistance Program, and the Rede Cegonha. These policies are part of a set of actions and measures aimed at building a care network to ensure qualified and humanized care to women during pregnancy, childbirth, and the postpartum period, and a safe birth and healthy growth and development to their children, as well as to reduce the high rates of maternal and infant morbidity and mortality (Sehnem, Saldanha, Arboit, Ribeiro, & Paula, 2020).

According to the recommendations from the Brazilian Ministry of Health, the care provided to high-risk pregnant women should include a comprehensive approach at all levels of care delivery based on their clinical, socioeconomic, and demographic characteristics. It should also be multidisciplinary and interdisciplinary, with shared and evidence-based clinical practices, aimed at reducing the risks of possible complications for the mother and/or fetus (Ministério da Saúde, 2012; Portaria nº 1,020 de 29 de Maio de 2013).
Hospital admission is the most appropriate monitoring procedure for this type of pregnancy due to some conditions or higher probability of complications (Ministério da Saúde, 2012). High-risk pregnancies often require long hospital stays, ranging from weeks to months in small wards, where pregnant women have to share small spaces with other patients, in an intense coexistence, while being daily evaluated by health professionals. All these factors legitimize the risk for pregnant women (Coelho, Souza, Torres, & Drezett, 2017; Costa et al., 2019; Gregorio & Mariot, 2019). Some studies attach great importance to the experience of high-risk pregnant women during hospital stay due to the difficulties in understanding the situation, the long period of time to adapt to the circumstances that led to hospital admission, the frustrated expectations about pregnancy, or the range of feelings experienced (Wilhelm et al., 2015; Oliveira & Mandú, 2015). Other studies show that high-risk pregnant women are vulnerable to emotional fragility and instability because they experience negative feelings that may cause discomfort and make it difficult for them to accept the diagnosis of high-risk pregnancy, with a direct impact on their health (Coelho et al., 2017; Costa et al., 2019).

Therefore, the complexity involving a high-risk pregnancy should not be limited to the biological aspect, the identification of its causes and consequences, the treatment of the complications, or the description of the feelings: it should rather be understood based on these women's social dynamics. Thus, this study reflects on the need to understand the experience of a high-risk pregnancy during hospital admission based on the meanings attributed by high-risk pregnant women. In this way, health professionals will be able to design effective measures that take into account the singularity and the comprehensiveness of the care delivered to these women.

**Research question**

What are high-risk pregnant women’s social representations of hospital admission during pregnancy?

**Methodology**

An exploratory and descriptive study, based on the Social Representations Theory, was carried out with 68 hospitalized high-risk pregnant women in two public hospitals of reference in the state of Ceará, between July and September 2016. These maternity hospitals were selected because they are specialized tertiary care services, a reference for high-risk pregnancies, and have the largest number of high-risk births in the state. The number of participants corresponded to all pregnant women who met the following inclusion criterion: being hospitalized for at least 72 hours due to a high-risk pregnancy, regardless of gestational age. This period of hospital stay was established considering that the social representations are built from the knowledge and interaction with the phenomenon. Thus, expanding the pregnant women’s contact with the service and, consequently, their range of experiences, promotes the creation of representations. Pregnant women over 18 years of age or the parent of pregnant women under 18 years of age who accepted to participate in the study had to sign an Informed Consent Form.

Data were collected through the administration of the Word Association Test (Teste de Associação Livre de Palavras, TALP), a projective technique that assists individuals in revealing their memory’s latent content about a specific implicit object, often in their reports. The TALP is an instrument adapted to the field of social psychology that has enriched studies on social representations and consists of evoking ideas through inductive stimuli, which must be defined considering the object under analysis (Coutinho, 2017).

The following inductive stimuli were chosen for the test: “pregnancy”, “high-risk pregnancy”, and “hospital admission”, as they are closely connected to the object of this study and part of the pregnant women’s vocabulary. After the test was administered, a database was created with the set of evoked words corresponding to each inductive stimulus and with fixed variables for the pregnant women’s identification and description. These variables were: place of hospitalization (1- Santa Casa de Misericórdia de Sobral; 2 - Hospital Geral César Cals); number of pregnancies (1 -primigravida; 2 - multigravida), and the type of risk (1 - resulting from pregnancy; 2- aggravated pre-existing condition). Data were analyzed using the Tri-Deux-Mots software, version 5.3. This software interprets data based on the correspondence factor analysis (CFA), which represents graphically, in a plot, the correlations between fixed variables (in columns) and the modalities or variables of opinions (in rows), displaying the proximity, distance, confrontation, and attraction between the groups.

The Tri-Deux-Mots software analysis allows representing the evoked words in factorial axis and establishing the proximity/distance relationships between the semantic universes of the representational field, using the fixed variables and the opinion variables or inductive stimuli as references. It also allows analyzing the connections between the response profile in a given group through the words used to create the axes, considering the modalities of opinion or objectification.

The study complied with all ethical aspects regarding research involving human beings. This research was approved by the Research Ethics Committee of the State University of Ceará and the Hospital Geral Dr. César Cals under numbers 1.532.814 and 1.630.695 and CAAE 53573216.0.0000.5534 and 56479316.7.0000.504, respectively. This research was also authorized by the scientific research committee of the Santa Casa de Misericórdia de Sobral.

**Results**

The participants were pregnant women, aged 15-41 years, with a predominance of the 15-25 age group (47.1%),
who attended school up to the secondary level (44.2%), had a stable relationship (77.9%), were employed (51.5%), and were Catholic (63.2%). More than half of the participants were multigravida (64.7%), in the third trimester (82.4%). In 82.4% of participants, the risk resulted from pregnancy.

The length of hospital stay ranged from 3 to 60 days, with a mean of 6.9 days. The most common diagnoses were: pre-eclampsia (20.6%); prelabor rupture of membranes (19.1%); diabetes (11.8%); risk for preterm labor (10.3%); and placenta previa (10.3%). A total of 606 words were evoked, of which 68 were different. The evoked words allowed the proximity to the consensual contents shared by the pregnant women regarding social representations of high-risk pregnancy during hospitalization. In turn, the Tri-Deux-Mots software analysis allows the representation in factorial axes (F1 and F2) of how the social representations of a given phenomenon are structured in the group under study, highlighting the semantic elements that constitute the universe shared by the pregnant women in relation to the different stimuli.

Figure 1 represents both axes: axis F1 (horizontal axis) and axis F2 (vertical axis). The fixed variables are represented in green, PLA refers to the place of hospitalization, PRE to the number of pregnancies, and RIS to the type of risk. The words in Factor 1 are highlighted in red, and those words in Factor 2 are highlighted in blue. The numbers 1, 2, and 3 next to the evoked words are equivalent to the inductive stimulus.

Concerning the stimulus pregnancy, on the F1 horizontal axis, the most representative words and their corresponding factor (correspondência por fator, CPF) were: care (CPF: 111) and birth (CPF: 51) in the group of multigravida (CPF: 431) and primigravida (CPF: 247), with risk resulting from pregnancy (CPF: 205), hospitalized at the Santa Casa de Misericórdia de Sobral. On the left side, the words were: life (CPF: 75), dream (CPF: 54), and uncertainty (CPF: 42), in the group of pregnant women with pre-existing conditions aggravated by pregnancy (CPF: 173), hospitalized at the Hospital Geral Dr. César Cals.

Regarding stimulus 2, high-risk pregnancy, the most evoked words on the F1 horizontal axis, on the right side, were: unexpected (CPF: 45), fear (CPF: 34), and illness (CPF: 33), associated with the risk resulting from pregnancy, both in primigravida and multigravida. On the left side, the most evoked words were: concern (CPF: 87) and struggle (CPF: 53), in the group of pregnant women with pre-existing gestational risk.

The third stimulus, hospital admission, on the F1 horizontal axis, on the right side, the evoked words were: uncertainty (CPF: 144), in the group of pregnant women with risk resulting from pregnancy. On the left side, the evoked words were: safety (CPF: 70), in the group of women with pre-existing conditions aggravated by pregnancy.

On the F2 vertical axis, considering the stimulus pregnancy, the most representative words on the upper corner were: blessing (CPF: 39) and anxiety (CPF: 81) in pregnant women with pre-existing gestational risk. On the lower corner, the most representative words were: difficulty (CPF: 184), family (CPF: 69), maternity (CPF: 48), and child (CPF: 34), concerning the group of primigravida women with risk resulting from pregnancy.

With regard to the stimulus high-risk pregnancy, on the F2 vertical axis, the most evoked words were problem (CPF: 26), on the upper corner, representing the group of multigravida with aggravated pre-existing risk, and death (CPF: 50), on the lower corner, representing the group of primigravida women with risk resulting from pregnancy.

On the F2 axis, the most evoked words for the third stimulus were suffering (CPF: 72), on the upper corner,
representing the group of multigravida with aggravated risk who were hospitalized at the Santa Casa de Misericórdia de Sobral, and “prison” (CPF: 69), “improve” (CPF: 50), and “longing” (CPF: 28), on the lower corner, representing the group of primigravida women with risk resulting from pregnancy who were hospitalized at the Hospital Geral Dr. César Cals. The elements that constitute the social representations are presented and discussed based on the fixed variables and pregnant women’s characteristics with a view to capturing the meanings attributed. In turn, Figure 2 presents the consensual universe of the social representations of high-risk pregnant women regarding their experience during hospital stay.

Figure 2. Pregnant women’s social representations of pregnancy, high-risk pregnancy, and hospital admission during pregnancy.

Discussion

The sociodemographic and obstetric characteristics of the pregnant women participating in this study are similar to the profile of high-risk pregnant women found in other studies conducted over the years in maternity hospitals, in different regions of Brazil (Jantsch et al., 2017; Moura et al., 2018). The evoked words show a significant difference in the representational field of pregnancy and high-risk pregnancy. Pregnancy is considered a blessing, a dream, the ability to conceive a child, pregnancy is strongly associated with motherhood, family constitution, and care, conveying meanings that go beyond the physical and organic aspects. However, high-risk pregnancy is perceived within a challenging context, with unexpected complications, translated into illness and problem, that trigger feelings of fear and concern.

These constructs are part of the consensual universe and female stereotype that, over the years, have permeated social discourses and beliefs, indicating the connotations with the divine and the strong religious beliefs that permeate pregnancy representations and the association of the female figure with the family world of reproduction and motherhood, as well as the influence of pregnancy in the formation of women’s social identity (Coelho et al., 2017; Resende, 2017), reinforcing the nature of social representation in guiding the interpretations and meanings attributed by the individuals to relevant social objects.

However, these representations are not unique and crystallized because pregnancy started to represent uncertainties and difficulties which were associated with the specific condition of the pregnant women participating in this study, that is, the diagnosis of high-risk pregnancy. In this context, even though pregnancy is a dream, a poetic construct, it can trigger ambivalent feelings, causing women to alternate between joy and challenge. The coexistence of these feelings results from the uncertainty regarding the pregnancy outcome and the threat to the life and/or health of these pregnant women and their children, which are present throughout pregnancy, labor, and childbirth (Oliveira & Mandú, 2015; Wilhelm et al., 2015; Cabral et al., 2018; Costa et al., 2019).

For pregnant women whose diagnosis of high-risk results from the evolution of their pregnancy, the objectification of pregnancy occurs through childbirth, care, social institutions such as the family, and the figure of motherhood and the child, which acquire a meaning after pregnancy. The word “difficulty” reveals the way in which the context is perceived by these pregnant women due to the risk they were experiencing.

For pregnant women with pre-existing risk aggravated by pregnancy, the evoked words “blessing”, “dream”, and “life” reveal the glorification of pregnancy. However, the words “anxiety” and “uncertainty” represent pregnancy as a period of discoveries and adaptations in which the evolution of the gestational cycle competes with the development of some pre-existing aggravating factor. Therefore, for this group of women, pregnancy represents overcoming their risk situation.

Pregnancy is a physiological process and people tend to believe that it will develop naturally. However, a high-risk pregnancy deviates from what is normal, expected, or desired. It is an unfamiliar circumstance that has to be experienced and interpreted based on pregnant women’s knowledge, which is one of the characteristics of social representations. Thus, pregnant women made sense of their high-risk pregnancy in their world, considering it as an experience full of risks, complications, difficulties, and problems, in which death and loss were real and dreaded possibilities.

This representation was created based on the knowledge
shared in the daily lives of the social groups, the commonsense knowledge resulting from the interactions with other pregnant women, the information provided, the conversations with health professionals, previous pregnancies, and socialization. High-risk pregnancy is now anchored in possible unfavorable outcomes and objectified in unpleasant feelings and sensations.

For the group of women whose risk condition appeared after pregnancy (RIS1), the high-risk pregnancy was unexpected and contrary to their expectations. After pregnancy, they began to develop alterations anchored in illness, fear, and death, which they understood as consequences of the high-risk pregnancy in their consensual universe. Fear and death-related thoughts occur even in pregnancies with a normal obstetric evaluation. However, in high-risk pregnancies, these fears are accentuated and death becomes a potential threat (Cabral et al., 2018; Wilhelm et al., 2015).

The pregnant women with a risk condition aggravated by pregnancy (RIS2) considered the high-risk pregnancy as a concern, a struggle, and a problem, as this pre-existing factor constitutes a challenge for the development of pregnancy. For the pregnant women, the word struggle represents the duel between pregnancy and the risk factor. This perception regarding their pregnancy is objectified in the concern. For these pregnant women, becoming pregnant is overcoming the risk condition, and the desire to become a mother and meet the expectations regarding the mother-woman image and rectifying that content of the social representation of pregnancy.

With regard to the place of hospitalization, in both scenarios, the evoked words highlight the positive and negative aspects of the experience, which allows concluding that, even when hospitalized in different places, these women's realities are similar and the representations of the hospitalization process are associated with the phenomenon itself and the pregnant women's experiences and interactions.

The high-risk pregnant women who participated in this study, similarly as those in the study of Ferreira et al. (2019), perceived hospitalization as a period of anguish, loneliness, suffering, and longing because it was a new unexpected circumstance that removed them from their everyday lives and imposed emotional and structural adjustments. The hospital was perceived as a place of pain and suffering that kept them away from their lives, their homes, their work, and their families, and represented the confirmation of their risk condition.

Nevertheless, for these women, hospitalization also meant safety and a possibility to get better, as well as a place of protection, care, and support for the maintenance of their pregnancy. Studies by Piveta et al. (2016) and Costa et al. (2019) corroborate this idea, indicating that the recognition of the need for pregnancy monitoring, translated by the assistance and continuous fetal surveillance that these women would not otherwise receive, contributes to their acceptance and safety.

These perceptions regarding hospitalization are consistent with high-risk pregnancy representations. High-risk pregnancy was considered an illness, an unexpected and problematic situation, associated with death, that would require hospital care for treatment and improvement of risk conditions. Pregnant women fell safe and reassured when hospitalization is required for pregnancy monitoring and follow-up.

These women's social representations regarding hospitalization during pregnancy are also the result of interaction and communication processes experienced throughout their lives and during this period, through the contact with pregnant women in similar condition and the health team. They suffer the repercussions of the influence of the value and idea system that guides thoughts, behaviors, and actions in society.

The study is limited by the number of participants and the fact that it was conducted in only two public maternity units of excellence of the state of Ceará. Further studies should be carried out in other units, including private institutions that also provide care to high-risk pregnant women. Additionally, this phenomenon should also be studied from the perspective of health professionals and family members that also experience high-risk pregnancy in the hospital context. Nevertheless, these findings reflect on professionals' actions and contribute to a clinical practice that takes into account high-risk pregnant women's knowledge and experiences, thus minimizing the weaknesses and impacts of hospitalization.

**Conclusion**

This study presents the consensual elements, shared, regulatory, and materialized, that anchor and embody pregnant women's social representations of pregnancy, high-risk pregnancy, and hospitalization. The evoked words indicate the social representations regarding pregnancy, built on the valorization of the family nucleus. Pregnancy is realized as divine permission and the child's image, and anchored by the reproductive and matriarchal role. It is in the family that these women discover motherhood together with the beliefs and values that will be the basis for the development of their maternal role.

Women reveal a multiplicity of feelings and sensations when they realize they have a high-risk pregnancy. Women lose their notion of ideal pregnancy and regret and struggles with the uncertain outcome of pregnancy. Nevertheless, women still feel happy to be pregnant, which reinforces their biological role represented by motherhood, even under risk conditions.

Hospital admission was a unique experience in the life of these pregnant women. A particular event resulting from the high-risk condition intensified negative feelings and aggravated stress. Nevertheless, it also meant therapy, specialized care, and mother-child protection, symbolizing the possibility of a favorable outcome for pregnancy and birth. It is necessary to develop interventions and strategies appropriate for monitoring complications and reducing the number of hospitalizations of high-risk pregnant women. In this way, maternal-fetal safety is ensured and life, routine, bonds, and positive family experience of pregnancy are preserved. It is essential to

Revista de Enfermagem Referência 2020, Série V, nº3: e20040
DOI: 10.12707/RV20040
provide respectful and individualized care that meets pregnant women’s needs. This care should incorporate their ways of understanding the phenomenon and minimize the suffering and anguish felt during this period.

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