PROPOSO ASSISTENCIA PLAN PARA GESTANTES CON ANEMIA FERROPRIVA

PLAN PROPUESTO PARA ASISTENCIA EMBARAZADAS CON ANEMIA POR DEFICIENCIA DE HIERRO

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OBSEJCTIVE: proponer un plan de cuidado para mujeres embarazadas con deficiencia de hierro basado en los diagnósticos de enfermería de la North American Nursing Diagnosis Association (NANDA). Método: pesquisa descriptiva, bibliográfica, del tipo informativo acerca de la anemia ferropriva gestacional. Resultados: los riesgos de las mujeres embarazadas con anemia ferropriva se minimizan; el cuidado durante el periodo gestacional debe ser pautado en la sistematización del cuidado en el que cada mujer requiera atención individualizada y holística. Descriptores: Cuidado Prenatal; Anemia Ferropriva; Gestantes.

RESUMEN

Objetivo: proponer un plan de atención para las mujeres embarazadas con anemia por deficiencia de hierro en base a los diagnósticos de enfermería de la North American Nursing Diagnosis Association (NANDA). Método: investigación descriptiva y bibliográfica, del tipo de gestación con anemia por deficiencia de hierro, que fueron seguidas las siguientes etapas: fijación de objetivos, los criterios de inclusión de los artículos, la definición de la información que se extrae de estos artículos, selección y finalmente presentar los resultados. Resultados: la anemia ferropriva ocurre cuando la concentración de hemoglobina es inferior a la normal, con un menor número de eritrocitos en el torrente sanguíneo relacionada con la ingesta inadecuada de hierro, en la absorción deficiente de hierro y la inhibición de la absorción de este mineral. Conclusión: para que los riesgos de la gestante con anemia ferropriva se minimizan, el cuidado durante el periodo gestacional debe ser pautado en la sistematización del cuidado en el que cada mujer requiera atención individualizada y holística. Descriptores: Cuidado Prenatal; Anemia Ferropriva; Gestantes.
Iron deficiency anemia is due to the reduction of iron deposits in the body at a loss in the production of hemoglobin. The body can store approximately a quarter to a third of its iron and only after depletion occurs that develops anemia, the most common in the world, affecting all age groups. Over 500 million people are affected in greater proportion in developing countries, given that inadequate iron reserves may befall the inadequate intake or blood loss.\(^1\)\(^2\)

According to the literature, 20% of the world’s population does not have enough iron reserves in the body to replenish hemoglobin and any excess demand triggers the disease turning iron deficiency anemia in public health issue of astounding prevalence.\(^3\)

Anemia is a sign of underlying disorder, and not a specific disease. Occurs when the hemoglobin concentration is below normal and there is a smaller amount of erythrocytes in the bloodstream thus the amount of oxygen released into body tissues also decrease. The word originates from the Greek anemia, where a means deprivation and haima blood. When the hemoglobin concentration decreases blood levels short of arbitrated by the World Health Organization (WHO) is 13 g / dl for men, 12 g/dl for women and 11 g / dl for pregnant women and children under six years is said to have anemia.\(^4\)

According to the National Health Surveillance Agency (ANVISA) data on the prevalence of anemia in Brazil are still few and far between, but the iron deficiency anemia affects about 50% of children of preschool age, 20% in adolescents and 15-30% in pregnant women. Iron deficiency is due to factors such as prematurity, errors infant feeding, pregnancy, severe malnutrition, chronic blood loss, intestinal parasites and gastrointestinal ulcers.\(^5\)\(^6\)

The most vulnerable group is the problem in the reproductive period, particularly during pregnancy, and children in the early years of life, due to the poor socioeconomic situation. In Brazil, there are few studies that address the issue, but it is estimated that anemia affects 30-40% of pregnant women in different regions of the country. In terms of public health relevance of anemia in pregnancy arises not only the magnitude, more particularly, from the harmful effects that cause the health and quality of life of the mother and fetus.\(^7\)\(^8\)

Can be found three etiologic categories of anemia are: loss of erythrocyte bleeding occurring in the gastrointestinal tract, uterus, nose or any wound, decreased production of red blood cells needed for erythropoiesis, production reduced when the bone marrow is suppressed, because of inadequately stimulated is a lack of erythropoietin and increased destruction of erythrocytes may occur because of a hyperactive reticuloendothelial system, or the spinal produce abnormal erythrocytes.\(^8\)

The main causes of anemia are associated with inadequate intake of iron either in quantity or quality consumed in assimilation of dietary iron deficient or be reduced by the use of this mineral absorption inhibitors. The iron absorption by the organism depends on the type of iron in the diet. By eating foods that contain iron, it is also important to know the factors that can stimulate or decrease the absorption of the same.\(^5\)

Inadequate maternal nutrition has a major impact on the growth and development of the newborn, considering that the gestational period is a phase in which the nutritional needs are high, due to the physiological adaptations of the mother and the demand for nutrients fetal growth, so in most cases women suffer from iron deficiency during their pregnancy. On a study with pregnant women at the Health Center School in Sao Paulo / SP, showed that anemia in pregnancy carries a higher risk of prematurity, low birth weight, perinatal mortality and lower hemoglobin concentration in newborn.\(^9\)

Corroborating this study, a survey conducted with pregnant women enrolled in a university hospital in the city of Mato Grosso do Sul / MT in the period January-August 2007 aiming to identify the demographic profile and frequency of anemia and hemoglobinopathies in these women with a basis for future implementation of actions aimed at this population in the context of public health, highlighted the relevance and importance of early diagnosis based on indicators of preventive care and for clinical appropriate, with a view to reducing maternal mortality and neonatal services public health.\(^10\)

Thus it is essential to monitoring of pregnant women in the Family Health Strategy (FHS), considering that during prenatal care is recommended to include compulsory supplement ferrous sulfate even in areas of low prevalence of anemia. In areas where health resources are insufficient and there is a high prevalence of anemia, the hemoglobin and hematocrit are used as screening tests or even to confirm the diagnosis.\(^3\)
In the case of anemia in pregnancy, iron deficiency is caused by iron deficiency (DF) and the reduction in their inventory levels in the body, evidenced by reduced rates of transferrin and ferritin, with or without the presence of anemia, ie, is a subclinical situation. Iron deficiency anemia is a condition in which there is a reduction of the total body iron to exhaustion of its reserves and the supply of it is insufficient to meet the body's needs. Characterized by a deficiency in the size and number of red blood cells or amount of hemoglobin present in these cells. Iron deficiency anemia is thus defined as a pathological condition which presents the lowest level acceptable in hemoglobin or hematocrit levels varying according to the life cycle. It is a clinical situation.  

In Brazil, one of the triggering factors of iron deficiency anemia is a poor diet. In women of childbearing potential hypermenorrhea undervalued is because 95% of iron deficiency anemia, and the ratio of prevalence to be 20 times higher in women than in men. Iron deficiency anemia also affects pregnant women, in order that the passage of iron across the placenta to meet fetal needs, causes a negative iron balance be needing supplementation of this mineral in the diet.  

Anemia in pregnancy, defined as the presence in the peripheral blood of low hemoglobin levels is the most common hematological problems of pregnancy, affecting more than 50% of pregnant women. In poorer countries, this figure may reach 88%. It is worth noting that hemodilution and expansion of red cell mass characteristics of pregnancy, complicate the laboratory diagnosis of anemia. 

The diagnosis of iron deficiency anemia is detected by the blood test, the measurement of ferritin and transferrin. The CBC is the most common test requested in Basic Health Units (BHU), which is a method of easy accessibility and they suffer less circadian variation of results. This test shows anemia characterized by the presence of red blood cells smaller than normal, as they lack hemoglobin content. 

Another way to diagnose anemia is by measurement of transferrin, a protein that carries this plasma, the absorbed iron. Saturation levels below 18% indicate states of disability, being a criterion of inadequate supply of iron to the bone. This has been considered the best way to diagnose which is not influenced phenomena of inflammatory, infectious and hemodilution, and allows the evaluation of the various stages of anemia and a differential diagnosis between the various causes of anemia. 

The reduction in blood hemoglobin concentration affects the transport of oxygen to the tissues causing mucosal changes and gastrointestinal, such as pallor, glossitis, stomatitis, dysphagia, fatigue, weakness, palpitations, reduced cognitive function of growth and psychomotor development. 

The most common symptom is conspicuous pale mucous membranes, especially in the eyes lids. There tiredness while exercising, feeling lightheaded, fainting and dyspnea. Certain people have anorexia, which worsens the situation. It is very common for the individual complaining of palpitation of the heart beat faster to compensate for the lack of red blood cells. 

Iron deficiency anemia causes the following adverse effects or consequences: decreased work productivity, decreased learning ability, growth retardation, apathy, significant loss of cognitive ability, low birth weight and perinatal mortality. As the signs and symptoms of iron deficiency are nonspecific, it is necessary to carry out laboratory tests to be confirmed the diagnosis of iron deficiency anemia. 

There are two types of treatments for iron deficiency anemia: preventive and therapeutic supplementation and nutritional interventions. Supplementation should occur mainly during the second half of pregnancy. However, its control consists in planning interventions aimed at adolescents and women prior to conception, as well as the inter-gestational interval. This measure has demonstrated beneficial effects for women. 

Iron deficiency can be corrected through preventive supplementation. This supplementation should be distributed to all pregnant women in primary health care. In areas of low prevalence of anemia dose recommended by WHO is 60 mg of elemental iron per day with 250 mg of folic acid and in areas of high prevalence, 120 mg of elemental iron and 500 mg of folic acid. 

Supplementation therapy in the treatment with iron should be used in all those with clinical and laboratory diagnosis of anemia, since the changes in diet alone do not meet these needs. The treatment of choice is oral administration of iron, and the choice is ferrous sulfate. The administration parenteral should be reserved for who has intolerance to oral iron. 

The correction of anemia usually occurs within six weeks. However, the replenishment of reserves iron occurs in four to six months. 

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due primarily, at decreasing absorption iron after correction of anemia.4

Among the population Brazilian, there evidences of association between prevalence of anemia and iron deficiency in the diets, once that the total quantity and bioavailability iron seem insufficient to meet the individual needs us various age groups.17

Iron deficiency affects mainly the population of developing countries. Difficult cited health services, little diet balanced, unavailability of supplements, foods low in iron, high frequency of infections and parasitic gastrointestinal added exposure unsanitary conditions favor significantly to the emergence of this condition.18

A study with pregnant women poor adolescents, of low schooling, with lower attention during the pre-natal and with sons who were born with low weight, demonstrated that the same are factors that hinder a adequate insertion of the woman in labor market, which will entail worst conditions of employment and salary.17

The impoverishment of the population and lack of resources to purchase healthy foods are not the only causes of anemia. Despite poverty be a strong hindrance to a diet diversified with foods rich in iron, believes-if that poor alimentary education and the habit of eating out from home are factors determinants of the problem, which would explain its high prevalence also in countries developed.19

The central focus of nursing is the care of pregnant women in view of the scientific and humanistic aspects, exercised through the nursing process. Therefore, the Nursing Care System (NCS) is the scientific method to identify and solve problems nursing being composed of the following steps: data collection, nursing diagnosis, planning, intervention and evaluation. The systematic survey of users’ data is the first step of the nursing process, and lends itself to determine the current health status and past the same, their functional status and assessment of problem solving.20

The survey information of these can be done by interview, physical examination and reading on the records. Much more than a information bank clinics, the lifting of data should be centered us aspects bio-psycho-spiritual, in order to conduct the nurse the meet adequately the needs individual.21

The assistance of the nurse pregnant women is one of the tasks within the ESF. During prenatal iron deficiency anemia presents itself as one of the most common problems. Thus, its effects in pregnancy are presented as obstetric risk factor. Given that iron deficiency anemia does not imply referral to the prenatal high-risk, assistance to pregnant women remains the responsibility of nurses in the Primary Health Care (PHC) .22,3

Therefore, the nursing consultation the nurse needs to use components of the scientific method to identify situations of health/illness, prescribe and implement measures to contribute to the promotion, prevention, health protection, recovery and rehabilitation of the individual, family and community. Consultation of Nurse specific to that group of women has the following goals: the end of a pregnancy and delivery without complications related to iron deficiency anemia, the hemoglobin levels return to normal, and that they understand the treatment prescribed.7

The nurse, in providing care to pregnant women should allow the same to participate actively in attendance. Through the interest and willingness to host, promote freedom of speech realizing the pregnant woman as a unique and subjective. Thereafter, the assistance is planned considering the individuality of each woman allowing formation of bonds and beneficial relationship between the two.21

Given all these considerations, it is believed that this study has important relevance for pregnant women and health professionals, given that care during pregnancy favors specific care to the mother and fetus, within a holistic view, especially in for assistance to women during prenatal care. You can also encourage nurses to program the SAE in their care practice in order to provide care that meets the pregnant women in the biopsychosocial and spiritual aspects.

**METHOD**

In this study, we used the literature search, the type information, where we followed the following steps: setting objectives, criteria for inclusion of articles, defining the information to be extracted from these articles, selection, and finally present the results.

A search of the selected publications was conducted specifically in the database of the following sites: Latin American and Caribbean Health Sciences (LILACS) and Pubmed, sites of the Ministry of Health Besides books NANDA, NIC and NOC in the period January to May 2011.

The selection of articles was through reading titles and abstracts of papers which had a direct relationship with the subject,
trying to explain a problem from published references, intending to gather knowledge on the subject.

Was used as a criterion for inclusion: articles published in full in the period 1985-2010 in Portuguese, Spanish and English publications in national and international journals in the databases already set and had to its content, nursing care for pregnant women with iron deficiency anemia. Exclusion criteria were: article abstracts and articles not freely available; articles in languages other than English, Portuguese and Spanish.

**RESULTS**

The nursing care plan for pregnant women with iron deficiency anemia was prepared according to the NANDA Taxonomy II.

<table>
<thead>
<tr>
<th>Diagnostics</th>
<th>Goals</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Imbalanced Nutrition: less than body requirements related to inability to absorb nutrients;</td>
<td>The pregnant woman must ingest the daily nutritional requirement, in accordance with your level of activity and their metabolic needs.</td>
<td>1.1 Determine daily caloric requirements and proper; 1.2 Weigh and monitor the laboratory results; 1.3 Explain the importance of proper nutrition;</td>
</tr>
<tr>
<td>2. Impaired Swallowing evidenced dysphagia</td>
<td>The expectant mother must report improvement in ability to swallowing.</td>
<td>2.1 Eat slowly, ensuring that the anterior portion has been disappeared; 2.2 Make a pregnant woman feel in the seat with the neck slightly flexed; 2.3 Teach the family emergency interventions in case of obstruction;</td>
</tr>
<tr>
<td>3. Fatigue, related to inadequate tissue oxygenation, secondary anemia;</td>
<td>Encourage activities that help the physical aspects, cognitive, social and affective.</td>
<td>3.1 Explain the reason for fatigue 3.2 Recommend to avoid overexertion 3.3 Emphasize the need to sleep 8:00</td>
</tr>
<tr>
<td>4. Spontaneous Ventilation impaired related to metabolic factors;</td>
<td>Maintain effective breathing pattern and present better gas exchange in the lungs.</td>
<td>4.1 Monitor respiratory rate; 4.2 Help in reducing anxiety; 4.3 Stay with the expectant mother and guide it to breath slower and effectively;</td>
</tr>
<tr>
<td>5. Peripheral tissue Perfusion ineffective, poor knowledge-related disease process</td>
<td>Tissue cutaneous sensory function should present: skin and mucous membranes, and a good tissue perfusion.</td>
<td>5.1 Monitor the levels of hemoglobin 5.2 Monitor vital signs 5.3 Teach the expectant mother to keep the heated ends 5.4 Position the patient to improve the peripheral position 5.5 Plan a program of daily walks</td>
</tr>
<tr>
<td>6. Risk of infection related to inadequate secondary defenses</td>
<td>Improvement in the State of immunity, and describe risk factors associated with infection and necessary precautions.</td>
<td>6.1 Teach to prevent urinary tract infection during pregnancy; 6.2 Explain the greater vulnerability to infection during pregnancy; 6.3 Teach ways to prevent infection post childbirth;</td>
</tr>
<tr>
<td>7. Ineffective Health Maintenance, related to the lack of education and/or knowledge;</td>
<td>Present stimulus or engage in health maintenance behaviors.</td>
<td>7.1 Investigate if you have resources you need at home; 7.2 Advice about lifestyle (safe sex, family planning);</td>
</tr>
<tr>
<td>8. Deficit in auto care: food, related to weakness (decreased motivation);</td>
<td>Show interest and ability to feed.</td>
<td>8.1 Stimulate the consumption of food that she enjoys; 8.2 Make meals are made in a nice atmosphere 8.3 Provide social interaction during the meal;</td>
</tr>
</tbody>
</table>

![Figure 1. Care Plan for pregnant women with iron deficiency Anemia - Natal/RN-2012. Source: current research](image-url)
The SAE is a means for the nurse to apply their technical and scientific knowledge characterizing their professional practice, giving it autonomy in data collection, prescriptions and nursing interventions effective. When planning assistance, assumes responsibility with the assisted since planning allows you to diagnose the needs of the same, ensuring proper prescription of care, guiding supervising, evaluating the results and quality of care, allowing for better performance of their actions. 25

**CONCLUSION**

With the assistance of the nurse during the prenatal period, it is possible to detect early the presence of iron deficiency anemia and prevent the pregnant woman develops a complication, and his son. Therefore, it is important that nurses, as one of the professionals who are directly involved with the mother during the prenatal period, be able to recognize and define behaviors for monitoring the same.

Given the SAE, the nurse can assist geared especially to pregnant women with iron deficiency anemia, in view of its technical and scientific knowledge to provide the range of expected results in both prevention and treatment.

In virtue of what was discussed sees the importance of nurses in the care of pregnant women facing a prenatal quality grounded in SAE, as the way to meet the needs of the same with iron deficiency anemia, understanding that simple measures can be decisive action to prevent this disease and its complications.

It is suggested, therefore, that nurses deepen scientific knowledge regarding both the nursing process as in iron deficiency anemia since this problem can be solved even in primary care.

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