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Nursing assistance to women with pre-eclampsy: integrative review

Asistencia de enfermería a mujeres con pre-eclampsia: revisión integrativa

Assistência de enfermagem às mulheres com pré-eclampsia: revisão integrativa

ABSTRACT

Introducción: la preeclampsia es la complicación clínica más común del embarazo y la principal causa de morbilidad, mostrando la importancia de una atención prenatal de calidad en la detección precoz y adecuado manejo clínico de los signos y síntomas sugestivos de complicaciones obstétricas. Objetivo: Evidencia científica sobre cuidados de enfermería para mujeres con preeclampsia. Método: estudio descriptivo de revisión integrativa de la literatura, con un marco temporal entre 2015 y 2020, en portugués, inglés y español, la búsqueda se realizó en octubre de 2020. Resultado: los estudios primarios fueron categorizados en atención prenatal y manejo asertivo en el contexto hospitalario, con énfasis en el rol del enfermero, destacando la relevancia de las actividades realizadas, tales como: administración de medicamentos, solicitud e interpretación de pruebas de laboratorio, verificación de constantes vitales. Conclusión: el manejo adecuado permite un pronóstico materno-fetal favorable, por lo que el desempeño de la enfermería ante la preeclampsia es fundamental, tanto en atención primaria como hospitalaria.

DESCRIPTORS: Nursing Care; Pre-eclampsia; Prenatal Care; High-Risk.

RESUMEN

Introduction: preeclampsia is the most common clinical complication of pregnancy and the main cause of morbidity and mortality, showing the importance of quality prenatal care in the early detection and adequate clinical management of signs and symptoms suggestive of obstetric complications. Objective: scientific evidence on nursing care for women with pre-eclampsia. Method: a descriptive study of integrative literature review, with a time frame between 2015 and 2020, in Portuguese, English and Spanish, the search was carried out in October 2020. Result: the primary studies were categorized in prenatal care and assertive management in the hospital context, with emphasis on the role of the nurse, emphasizing the relevance of the activities performed, such as: medication administration, request and interpretation of laboratory tests, verification of vital signs. Conclusion: proper management allows for a favorable maternal-fetal prognosis, therefore, nursing performance in the face of pre-eclampsia is essential, both in primary care and in hospital care.

DESCRIPTORES: Atención de Enfermería; Pre-eclampsia; Atención Prenatal; embarazo de alto riesgo.

RESUMO

Introdução: a pré-eclâmpsia é a complicação clínica mais comum da gestação e a principal causa de morbimortalidades, evidenciando a importância de um pré-natal de qualidade na detecção precoce e manejo clínico adequado de sinais e sintomas sugestivos de complicações obstétricas. Objetivo: levantar evidências científicas sobre a assistência de enfermagem à mulher com pré-eclâmpsia. Método: estudo descritivo de revisão integrativa da literatura, com recorte temporal entre 2015 e 2020, nos idiomas português, inglês e espanhol, a busca foi realizada em outubro de 2020. Resultado: os estudos primários foram categorizados em assistência pré-natal e manejo assertivo no âmbito hospitalar, com ênfase no papel do enfermeiro, ressaltando a relevância das atividades exercidas, como: administração de medicamentos, solicitação e interpretação de exames laboratoriais, verificação dos sinais vitais. Conclusão: o manejo adequado possibilita um prognóstico materno-fetal favorável, portanto é imprescindível a atuação da enfermagem frente à pré-eclâmpsia, tanto na atenção primária quanto na assistência hospitalar.

DESCRIPTORES: Cuidados de enfermagem; Pré-eclâmpsia; Pré-natal; Gravidez de alto risco.

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INTRODUCTION

Pregnancy is a physiological process experienced by women and marked by a series of organic changes. However, such changes when associated with some risk factors, can bring unfavorable maternal-fetal outcomes, such as preeclampsia. This is the most common clinical complication of pregnancy and the main cause of maternal morbidity and mortality. It is characterized as a specific pregnancy pathology whose detection occurs through the emergence of Systemic Arterial Hypertension after the 20th week of pregnancy accompanied by proteinuria.⁽¹⁾

Despite the innumerable advances in treatments to prevent obstetric complications, maternal death indicators still have significant rates. The deaths in question still occur due to preventable complications, especially when considering the importance of quality prenatal care in early detection and adequate clinical management of signs and symptoms suggestive of obstetric complications.⁽²⁾

The realization of an effective follow-up involves the active search for pregnant women early, the realization of health education on the importance of regular prenatal care for the identification of maternal and fetal diseases to minimize the problems through early interventions.⁽³⁾ It is up to the nurse to perform it together with the doctor, through subsequent consultations, physical examination, requesting tests to assess hemodynamic parameters and monitor fetal development,

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in addition to providing guidance on specific pregnancy care and necessary referrals.⁽²⁾

Therefore, nursing care must be judicious and precise, paying attention to the risk factors indicative of preeclampsia and possible evolution to eclampsia.⁽⁴⁾ This study aims to raise scientific evidence on nursing care for women with preeclampsia.

METHOD

It is an integrative literature review study, a method of descriptive investigative evaluation that allows a critical search of the evidence found on the topic. The following steps were followed: 1. Elaboration of the research question: "What is the scientific evidence about nursing care for women with preeclampsia?" 2. Search the databases with application of the inclusion and exclusion criteria; 3. Reading and critical analysis of the articles; 4. Categorization in order to organize the findings; 5. Interpretation and discussion of results; 6. Presentation of the review with details and synthesis of knowledge. For proper elaboration of the research question, the PICO strategy was used, which represents an acronym for Patient, Intervention, Comparison and Outcomes (outcome). Thus, "P" refers to pregnant women with preeclampsia, "I" nursing care in primary and hospital care, "C" comparing the impact of care or not, nursing in prenatal care and hospital for pregnant women with preeclampsia and "O" outcome of the clinical condition of pregnant women with nursing-assisted preeclampsia.

In October 2020, searches were carried out in the databases: National Library of Medicine (PubMed), and Scientific Electronic Library Online (SciELO), and in the Virtual Health Library (VHL) platform where several databases are indexed. It is noteworthy that the terminological variations in the different languages, as well as the synonyms were used to perform the searches using the Boolean operator AND for the simultaneous occurrence of the subjects.

The keywords were defined according to the Health Sciences Descriptors (DeCS), being: "cuidado de enfermagem", "pré-eclâmpsia", "pré-natal" and "gravidez de alto risco". Inclusion criteria were original, complete, open access articles published in Portuguese, English and Spanish, between the years 2015 and September 2020, available on the cited bases. Articles that were not related to the theme of the study, theses, dissertations, monographs and abstracts were excluded. After reading and

critical analysis based on the validation criteria, 10 articles were selected.

RESULTS

The following is a table with the selected publications and the respective characteristics of the studies, including: title, country, year of publication, objective, type of study and results.

DISCUSSION

Prenatal care

Prenatal care is essential for the prevention and early detection of maternal and fetal pathologies, allowing the exchange of information and experiences between the health professional and the pregnant woman. This meeting allows the identification of diseases that evolve silently, such as pre-eclampsia. This pathology is characterized by elevated blood pressure, declining renal and brain function. Therefore, prenatal care facilitates early identification and treatment measures for a healthy gestational period.⁽⁷⁾

Currently, the Ministry of Health recommends that at least 6 consultations be performed during prenatal care, for this purpose it is necessary to carry out a reliable and effective screening to assess and understand the risks.⁽⁷⁾ The study by Jesús-García

Figure 1- search flowchart in the databases.

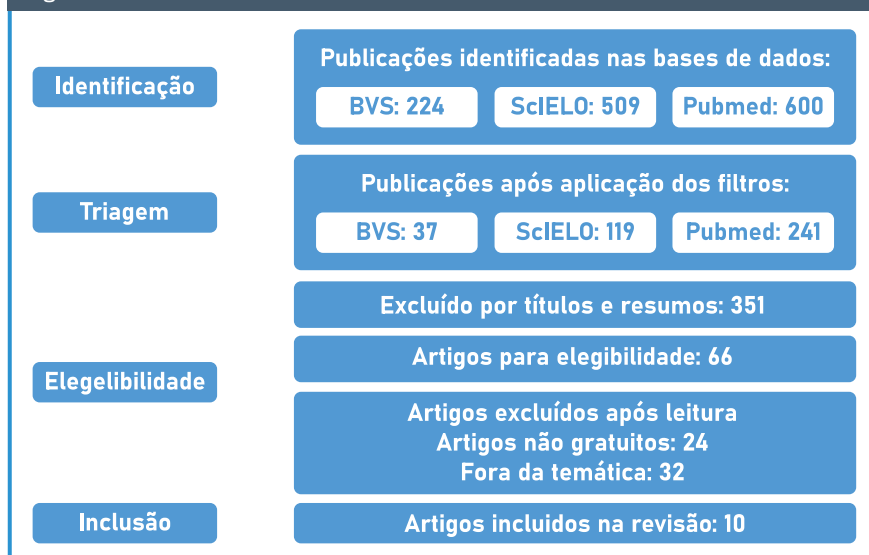


Chart 1- Characterization of included articles - 2020

TÍTULO	PAÍS/ ANO	OBJETIVO	TIPO DE ESTUDO	RESULTADOS
Rastreamento de pré-eclâmpsia no primeiro trimestre e profilaxia com aspirina: O nosso primeiro ano ⁽⁵⁾	Portugal 2020	Avaliar a implementação do rastreio combinado de pré-eclâmpsia no primeiro trimestre e o uso profilático de aspirina em baixa dose.	Estudo prospectivo	A associação de um modelo de rastreio combinado no primeiro trimestre com o uso profilático de aspirina é aparentemente eficaz na redução do risco de pré-eclâmpsia precoce.
Características clínicas, epidemiológicas y riesgo obstétrico de las pacientes con preeclampsia-eclampsia ⁽⁶⁾	México 2018	Descrever as características epidemiológicas, clínicas e antecedentes obstétricos das pacientes com diagnóstico de pré-eclâmpsia-eclâmpsia da unidade de cuidados intensivos adultos (UCIA).	Estudo transversal retrospectivo	Embora os dados não tenham sido suficientes para documentar, a proporção de pacientes com hipertensão arterial e história de pré-eclâmpsia, bem como hipertensão arterial comórbida, foi superior ao relatado em estudo com gestantes na Colômbia de 12,4%.
Prenatal screening for pre-eclampsia: Frequently asked questions ⁽⁷⁾	Alemanha 2019	Responder a perguntas comuns na prática clínica de rotina sobre o teste de rastreamento combinado para pré-eclâmpsia.	Descritivo	Dentre as atividades de enfermagem destaca-se a importância da avaliação dos indicadores de risco através da triagem nas consultas de pré-natal.

Cuidados pré-natais e puerperais às gestantes de um centro de saúde de Minas Gerais quanto ao risco de pré-eclâmpsia: aspectos clínicos, nutricionais e terapêuticos. ⁽⁸⁾	Brasil 2017	Avaliar os aspectos clínicos, nutricionais e terapêuticos nos cuidados pré-natais e puerperais às gestantes de um centro de saúde de Minas Gerais quanto ao risco de pré-eclâmpsia.	Descritivo exploratório	Durante as consultas de pré-natal deve-se investigar sobre a presença de fatores de risco relacionados ao histórico pessoal e familiar.
Assistência de enfermagem a parturientes acometidas por pré-eclâmpsia ⁽⁹⁾	Brasil 2016	Avaliar a assistência de enfermagem prestada à mulher acometida por pré-eclâmpsia e investigar junto aos enfermeiros, queixas, conflitos e medos da mulher no decurso da gestação.	Exploratório	Orientações dietéticas e de controle da pressão arterial; atendimento das necessidades individuais e avaliação dos resultados de exames laboratoriais.
Cuidados de enfermagem em pre-eclâmpsia leve en el hospital Mario Catarino Rivas, i semestre, 2018 ⁽¹⁰⁾	Honduras 2018	Apresentar o processo de cuidar de enfermagem que foi realizado com base nos princípios estabelecidos pela teoria de Doro-thea Orem e Virginia Henderson, onde a enfermeira ajudava a gestante com pré-eclâmpsia e a ensinava a se cuidar durante a internação	Estudo de caso	Realizar diagnóstico, planejamento, anamnese, exame físico detalhado, solicitar e interpretar exames complementares e orientar sobre o uso correto das medicações.
Assistência de enfermeiros na síndrome hipertensiva gestacional em hospital de baixo risco obstétrico ⁽⁴⁾	Brasil 2017	Analisar a assistência de enfermeiros às gestantes com síndrome hipertensiva, em um hospital de baixo risco obstétrico.	Pesquisa de campo descritiva	O estudo possibilitou analisar que a assistência de enfermeiros às gestantes com síndrome hipertensiva é essencial na preservação e manutenção da vida da mulher e do feto/neonato, pois este profissional possui diferencial, como autonomia e senso crítico, além do conhecimento técnico-científico, que quando somados a uma equipe multiprofissional torna o trabalho dinâmico e resolutivo.
Simulation-enhanced nurse mentoring to improve preeclampsia and eclampsia care: an education intervention study in Bihar, India ⁽¹¹⁾	Índia 2019	Avaliar o impacto da simulação baseada em treinamento em diagnóstico e gestão de PE / E em Bihar.	Estudo de simulação	O treinamento de simulação melhorou o uso de práticas baseadas em evidências em casos simulados de PE/E e tem o potencial de aumentar a competência do enfermeiro no diagnóstico e gerenciamento de complicações maternas complexas, como PE/E.
Simulation Study Assessing Healthcare Provider's Knowledge of Pre-Eclampsia and Eclampsia in a Tertiary Referral Center ⁽¹²⁾	Estados unidos 2016	Avaliar o conhecimento dos profissionais de saúde durante o parto em um centro de referência terciário no tratamento da pré-eclâmpsia e eclâmpsia.	Estudo de simulação	A utilização generalizada de sulfato de magnésio; entretanto, o uso de medicação anti-hipertensiva não é administrado universalmente de acordo com as diretrizes atuais. A importância do controle da pressão arterial para reduzir a morbimortalidade materna no contexto da pré-eclâmpsia deve ser enfatizada
Vida cotidiana y preeclampsia: Experiencias de mujeres del Estado de México ⁽¹³⁾	México 2016	Analisar a experiência de conviver com a pré-eclâmpsia no contexto da vida cotidiana de um grupo de mulheres do Estado do México que frequentam o Hospital Geral de Chimalhuacán.	Relato de experiência	Mostrou-se que em mulheres com pré-eclâmpsia, sua vulnerabilidade e risco de morrer são potencializados, ao viverem em crise, uma vez que seu cotidiano é desestruturado e alterado, não só nos aspectos biológicos ao sentir desconforto físico e corporal, mas também emocional.

Source: Own elaboration, Cachoeira-BA, 2020.

et.al.⁽¹⁴⁾, states that for the screening of pre-eclampsia, it is necessary to investigate the woman's obstetric history, in order to verify the risks that predispose her to develop pre-eclampsia, thus being an effective strategy for prevention. Therefore, Silva⁽⁸⁾ emphasizes the importance of this screening in prenatal consultations, being essential the evaluation of predisposing risk indicators.^(6,8)

It is indicated to double the surveillance for primiparous women, adolescents or women over 40 years of age, in addition to a previous history of preeclampsia, associations with comorbidities such as Systemic Arterial Hypertension, Diabetes Mellitus, thrombophilia and autoimmune diseases, which are the focus for prophylaxis and interventions. Thus, it is necessary to identify the symptoms of preeclampsia, which are: face edema, lower and upper limbs, weight gain, headache, blurred vision, respiratory distress. Preeclampsia is also associated, even with the absence of proteinuria, abnormal laboratory values, specifically thrombocytopenia and hepatocytosis, in addition to the appearance of signs or symptoms of target organ involvement, for example, renal impairment identified as acute insufficiency through the measurement of electrolytes.^(5,8)

Preeclampsia is associated with a greater chance of premature birth, low birth weight and fetal death. It is important to carry out treatment and care to reduce risks and aggravations. During clinical consultations, women who will need more careful surveillance should be identified, increasing the number of prenatal visits every 4 weeks up to 27 weeks, every 2 weeks between 28 and 35 weeks and weekly from 36 weeks.^(9,15)

Peçaroli et.al⁽¹⁵⁾ concluded that good tracking and identification of symptoms, together with recommended interventions, such as the use of acetylsalicylic acid (ASA) and calcium supplementation, contributes to reducing the risk of preeclampsia. The pathophysiology of the disease includes an imbalance between prostacyclin and thromboxane, with the administration of ASA in low doses of aspirin, a selective inhibition of thromboxane synthesis occurs in the platelet, without interfering with the production of prostacyclin in the vessels. Lourenço et.al.⁽⁹⁾,

corroborates indicating that after early screening, the use of aspirin administered at night has greater clinical relevance.^(15,9)

The low daily dose of aspirin is recommended for pregnant women identified as having a risk factor for preeclampsia. ASA should be administered as soon as possible, before 16 weeks, during the night. It can be maintained until the end of pregnancy, but suspension is also valid after 36 weeks, for complete platelet renewal at the time of delivery. With regard to calcium supplementation, the study associates a reduction in the risks of preeclampsia accompanied by a low calcium diet, supplementation can vary from 1 to 2 g.⁽⁵⁾

Peçaroli et.al.⁽¹⁵⁾, he also points out that prenatal care should not only contain preventive actions, but also reduce the progression of pathologies to more severe forms, such as eclampsia. Magnesium sulfate should be included in nursing care as the best prevention and treatment option, with use in patients with preeclampsia being recommended, especially for blood pressure that is difficult to control. Hilton et.al.⁽¹²⁾ points out, however, that the administration of magnesium sulfate as well as that of antihypertensives is not universally administered according to current guidelines.^(15,12)

In addition to the physical dimension, Vega-Morales⁽¹³⁾ highlights that care must be comprehensive in a way that encompasses the psychological demands of pregnant women affected by preeclampsia, since this pathology can impact on daily life and the exercise of self-care, requiring a family and social support network for a better coping with the situation.⁽¹³⁾

Hospital management

With the worsening of the clinical picture, every patient diagnosed with preeclampsia should be admitted for follow-up in a high-risk unit through complementary exams and the partogram, at the time of delivery, since such complications can result in maternal or fetal death. The preeclampsia picture is considered severe when the pregnant woman has systolic pressure greater than or equal to 160mmhg and diastolic pressure greater than or equal to 110mmhg, in addition to laboratory changes such as

proteinuria and fetal changes. They are also pointed out as more frequent complications, renal failure, pulmonary edema and coagulopathy, with possible evolution to HELLP syndrome and kidney injury.^(4,18)

In the hospital approach, the nurse has the task of evaluating and stabilizing the patient immediately after admission to a highly complex unit.^(17,10) The study by Peçaroli et.al.⁽¹⁵⁾, indicates as basic conduct in the case of preeclampsia: to ensure airway permeability, nasal oxygen support, position in lateral decubitus or semi fowler, use of Guedel cannula and venous access. This result coincides with a study by Aguirre et.al.⁽¹⁹⁾, in which a long period of hospitalization requires a high level of human and material resources.^(15,19)

The study carried out in 2018 in the city of San Maria⁽¹⁰⁾ presented an effective treatment for preeclampsia through the use of oral agents repeated every 30 minutes, such as nifedipine or labetalol. Kahalle, which points to the importance of the nurse's role in administering anti-hypertensive medication on time. The use of intravenous magnesium sulfate was shown to be effective in women who needed to prevent the most severe manifestation of preeclampsia, eclampsia, characterized by the presence of seizures. The study by Zhiqiang indicates the use of ulinastatin for systemic endothelial dysfunction.^(18,15,10,19)

It is important to carry out the appropriate treatment for each case and reassess each patient clinically and laboratorially, with the aim of maintaining maternal-fetal well-being. Therefore, for an adequate assistance, the technical-scientific knowledge of the nurse is essential, in order to favor early assistance, committed to the guidelines and intervals of drug therapies, avoiding the progression of symptoms.

With a view to better care performance, the study by Raney et. Al.⁽¹¹⁾, points out the importance of practice in simulated cases to provide greater safety to nurses during the management of complications related to pregnant women with preeclampsia or eclampsia.^(11,4)

CONCLUSION

Nursing care for pregnant women with

preeclampsia must be judicious and precise, it is emphasized that the care provided in primary care during prenatal care will be essential to minimize the problems resulting from the pathology, as well as its most serious manifestations. Proper management allows a favorable prognosis for both the pregnant woman and the fetus, so the professional must be able to deal with such circumstances through theoretical and practical knowledge.

It is worth mentioning that in the hospital context, as well as in primary care, nurses have a fundamental role in the outcome of the clinical condition of pregnant women affected by preeclampsia, and must always be attentive to the signs and symptoms indicative of worsening of the pathology, monitor the vitality of fetus, administer prescribed medications, evaluate laboratory tests, monitor vital signs, in addition

to promoting comfort and safety by establishing therapeutic communication and with a holistic view of the pregnant woman.

The nurse must demonstrate autonomy and critical sense in his/her performance in the face of preeclampsia, with constant updating, humanized and integral assistance, articulated with a multidisciplinary team, in order to contribute to a satisfactory outcome for the mother-baby binomial. ■

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