

ICNP® nursing diagnoses profile for prenatal by gestational trimester

Perfil de diagnósticos de enfermagem CIPE® para pré-natal, por trimestre gestacional
 Perfil de diagnósticos de enfermería CIPE® para atención prenatal, por trimestre gestacional

Érika Ribeiro Costa¹  <https://orcid.org/0000-0001-7440-0670>

Mariana Miranda Pina²  <https://orcid.org/0000-0003-0569-485X>

Rodrigo Jensen³  <https://orcid.org/0000-0001-6191-2001>

Milena Temer Jamas³  <https://orcid.org/0000-0002-9548-7629>

Cristina Maria Garcia de Lima Parada³  <https://orcid.org/0000-0002-9597-3635>

How to cite:

Costa ER, Pina MM, Jensen R, Jamas MT, Parada CM. ICNP® nursing diagnoses profile for prenatal by gestational trimester. Acta Paul Enferm. 2021;34:eAPE00575.

DOI

<http://dx.doi.org/10.37689/acta-ape/2021A000575>



Keywords

Standardized nursing terminology; Nursing diagnosis; Nursing process; Prenatal care; Primary health care

Descritores

Terminologia padronizada em enfermagem; Diagnóstico de enfermagem; Processo de enfermagem; Cuidado pré-natal; Atenção primária à saúde

Descriptores

Terminología normalizada de enfermería; Diagnóstico de enfermería; Proceso de enfermería; Atención prenatal; Atención primaria de salud

Submitted

March 25, 2020

Accepted

December 2, 2020

Corresponding author

Cristina Maria Garcia de Lima Parada
 E-mail: cristina.parada@unesp.br

Abstract

Objective: To identify nursing diagnoses by the International Classification for Nursing Practice (ICNP®) to prenatal nursing consultation in primary care according to gestational trimester.

Methods: This is a cross-sectional study conducted at a Family Health Unit in the city of Botucatu/SP. Forty-eight pregnant women, assisted from August to November 2015, participated in the 95 prenatal nursing consultations held. The Theory of Basic Human Needs was adopted as a framework.

Results: We identified 452 diagnoses, grouped into health promotion, risk diagnoses and focused on the problem. Most of them turned to psychobiological needs involving needs for nutrition, hydration, eliminations, and exercises and physical activities. Similarities were evident when considering the three trimesters of pregnancy, which may be due to the fact that only pregnant women of habitual risk were included in the study so that the proposed diagnoses were often related to physiological changes resulting from normal pregnancy. There was a small proportion of diagnoses aimed at psychosocial needs, with emphasis on the needs of security, gregariousness, and acceptance. No diagnosis has been proposed related to psychospiritual needs.

Conclusion: Most of the set of diagnoses proposed is in the context of developing healthy lifestyle habits. However, in this process, it is necessary to consider the need to expand the approach of pregnant women, in order to include psychosocial and psychospiritual diagnoses.

Resumo

Objetivo: Identificar diagnósticos de enfermagem pela Classificação Internacional para a Prática de Enfermagem (CIPE®) à consulta de enfermagem pré-natal na atenção primária, segundo trimestre gestacional.

Métodos: Estudo transversal, conduzido em uma Unidade de Saúde da Família do município de Botucatu/SP. Participaram 48 gestantes, atendidas nos meses de agosto a novembro de 2015, nas 95 consultas de enfermagem de pré-natal realizadas. Adotou-se como referencial a Teoria das Necessidades Humanas Básicas.

Resultados: Foram identificados 452 diagnósticos, agrupados em diagnósticos de promoção à saúde, de risco e com foco no problema. A maior parte deles voltaram-se às necessidades psicobiológicas envolvendo necessidades de nutrição, hidratação, eliminações e exercícios e atividades físicas. Evidenciaram-se semelhanças quando considerados os três trimestres de gravidez, o que pode decorrer do fato de terem sido incluídas no estudo apenas gestantes de risco habitual, de forma que frequentemente os diagnósticos propostos guardavam relação com alterações fisiológicas decorrentes da gravidez normal. Foi pequena a proporção de diagnósticos voltados às necessidades psicossociais, com destaque às necessidades de segurança, gregária e aceitação. Nenhum diagnóstico foi proposto relacionado às necessidades psicoespirituais.

¹Associação de Assistência à Criança Deficiente, Poços de Caldas, SP, Brazil.

²Santa Casa de Misericórdia de Guaratinguetá, Guaratinguetá, SP, Brazil.

³Faculdade de Medicina de Botucatu, Universidade Estadual Paulista "Júlio de Mesquita Filho", Botucatu, SP, Brazil.

Conflicts of interest: nothing to declare.

Conclusão: A maior parte do conjunto de diagnósticos propostos está no contexto do desenvolvimento de hábitos de vida saudáveis. Porém, nesse processo, há que se considerar a necessidade de ampliar a abordagem da gestante, de forma a contemplar diagnósticos psicossociais e psicoespirituais.

Resumen

Objetivo: Identificar diagnósticos de enfermería a través de la Clasificación Internacional de la Práctica de Enfermería (CIPE®) para consultas de enfermería prenatal en la atención primaria, según el trimestre gestacional.

Métodos: Estudio transversal, conducido en una Unidad de Salud de la Familia en el municipio de Botucatu, estado de São Paulo. Participaron 48 mujeres embarazadas, atendidas entre los meses de agosto y noviembre de 2015, en 95 consultas de enfermería prenatal. Se adoptó la teoría de las necesidades humanas básicas como marco referencial.

Resultados: Se identificaron 452 diagnósticos, agrupados en diagnósticos de promoción de la salud, de riesgo y con foco en el problema. La mayor parte se relacionó con las necesidades psicobiológicas, que incluye necesidades de nutrición, hidratación, eliminación y ejercicio y actividad física. Se observaron semejanzas cuando se consideraron los tres trimestres del embarazo, lo que puede provenir del hecho de haber incluido solo gestantes de riesgo normal en el estudio. De esta forma, los diagnósticos propuestos estaban con frecuencia asociados con alteraciones fisiológicas resultantes de un embarazo normal. La proporción de diagnósticos relacionados con las necesidades psicossociales fue pequeña, con énfasis en la necesidad de seguridad, gregaria y de aprobación. No se propuso ningún diagnóstico relacionado con las necesidades psicoespirituales.

Conclusión: La mayor parte del conjunto de diagnósticos propuestos está dentro del contexto del desarrollo de hábitos de vida más saludables. Sin embargo, en este proceso hay que considerar la necesidad de ampliar el enfoque hacia la mujer embarazada, a fin de contemplar diagnósticos psicossociales y psicoespirituales.

Introduction

The Nursing Process (NP) organizes and qualifies nurses' work, insofar as it confers specificity and quality to nursing care. As a working method, it allows to follow the clinical evolution of assisted individuals, directs care and facilitates the registration of activities, supporting the nursing team with legal support.^(1,2)

NP, which in primary care corresponds to the Nursing Consultation, is organized in interrelated and interdependent stages, namely: Data Collection or Nursing History, Nursing Diagnosis (ND), Nursing Planning, Implementation of Actions and Nursing Evaluation. For its operationalization, mandatory in places where nursing care takes place, nurses must make use of standardized language systems and be guided by theoretical frameworks.⁽³⁾

The International Classification for Nursing Practice (ICNP®) is an information tool to describe nursing care. Its terms provide standardized documentation of user care. Thus, it provides data that evidence the contribution of nursing in health care and promotes advances in professional practice, through its application in nursing care, education, research and management. It is a combinatorial terminology and its seven-axis model (focus, judgment, means, action, location, time and client) allows the composition of statements of nursing diagnoses, interventions and outcomes.

In ICNP®, ND is defined as a title attributed by nurses when making decisions about a phenomenon that is the focus of nursing interventions. The diagnosis consists of the composition of a term related to a focus and a judgment. In specific cases, the term related to judgment is not mandatory when it is a clinical finding.^(4,5)

There are experiences using ICNP® associated with Wanda Horta's Nursing Theory.^(6,7) This theory started from the Basic Human Needs, which were categorized by Maslow hierarchically, from the smallest to the most important. Horta, however, classified needs into two categories: psychobiological and psychosocial. It was assumed that when identifying the needs in the first stage of NP, the Nursing History, nurses would be able to define users' health needs and to develop a care plan; this should include patients' degree of dependence and the interventions to be performed.⁽⁸⁾

The present study, aimed at the application of ICNP® in prenatal nursing care, it is justified by the potential of using this classification system in primary care and because studies on the prevalence of nursing diagnoses in pregnant women are still scarce. A review study that addressed publications related to ICNP® between 2008 and 2017 identified 35 studies, of which only one international article was aimed at pregnant women in prenatal care.⁽⁹⁾ It is also justified by the fact that women are the largest users of *Sistema Único de Saúde* (SUS –

Unified Health System) and the fact that the main health policy aimed at this group is *Rede Cegonha* (Stork Network), which has among its guidelines for expanding access and qualifying prenatal care.⁽¹⁰⁾ Finally, it is justified by the possibility of instructing nurses in compliance with Resolution 358/2009 of the Federal Nursing Council (*Conselho Federal de Enfermagem*), which provides for the mandatory performance of NP.⁽³⁾

Thus, the objective was to identify nursing diagnoses of ICNP[®] in the prenatal nursing consultation in primary care, according to the gestational trimester.

Methods

This is a cross-sectional study, conducted in a Family Health Unit, located on the outskirts of the municipality of Botucatu/SP. In this Unit, only pregnant women of usual risk are treated.

The Theory of Basic Human Needs was adopted as a framework,⁽⁸⁾ although it is recognized that health needs are imposed by social life and, therefore, are not restricted to those referred to in the context of biopsychosocial aspects.⁽⁶⁾

The study population consisted of all pregnant women assisted in prenatal consultations (scheduled or occasional) from August to November 2015, since there was no refusal to participate in the research. Thus, 48 women participated, totaling 95 prenatal nursing consultations carried out in the period.

Data collection was conducted by an obstetrics professor, an undergraduate student in nursing and two nurses. The consultations took place according to the unit's routine, in a favorable environment. At the end of the consultation, after the pregnant woman left the room, an instrument built for this study was filled out, containing the pregnant woman's identification data, the clinical history description and nursing diagnoses.

The variables to characterize the study participants were: age (years), place of birth (city of birth), marital status (with partner, without partner), school approval (years), obstetric history: number

of pregnancies, deliveries, abortions, cesarean sections and number of live children.

To elaborate the diagnoses, four steps were followed: 1 - reading the nursing history, identifying significant words; 2 - rereading the highlighted words, organizing them based on clinical reasoning; 3 - selection of nursing diagnoses titles from ICNP[®] version 2015 from pre-coordinated concepts;⁽⁴⁾ 4 - construction of titles using primitive concepts from ICNP[®], version 2015, following ISO 18104: 2014.⁽⁵⁾ The diagnoses were organized to promote health, risk and focus on the problem. Subsequently, these diagnoses were updated to ICNP[®], version 2019-2020.⁽¹¹⁾

For data analysis, a database was built in a spreadsheet using Excel software, and the data were submitted to descriptive analysis.

This study was approved by the Research Ethics Committee of *Faculdade de Medicina de Botucatu, Universidade Estadual Paulista Júlio de Mesquita Filho* (CAAE (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration) 44875415.0.0000.5411) and followed the recommendations of research involving human beings.

Results

The pregnant women's characterization indicates that they are young women, with mean age of 24.4 years (SD = 7.83). Most had eight or more years of school approval (73.5%); was born in the municipality (61.8%); had a partner (73.5%); she was not a primigravida (73.5%) and had no history of abortion (70.6%). In total, 452 nursing diagnoses were identified in 95 nursing consultations, an approximate average of five diagnoses per consultation. Table 1 shows the psychobiological needs, including diagnoses of health promotion, risk and focusing on the problem.

In the first trimester, the most frequent nursing diagnoses for health promotion were: No Complication During Pregnancy (40.0%), Adherence To Dietary Regime (22.9%) and Negative Laboratory Result (22.9%); in the second trimester,

Table 1. Nursing diagnoses of health promotion, risk and focused on the problem, according to trimester of pregnancy and psychobiological needs, presented by Basic Human Needs (n = 95)

Nursing diagnoses	1 st trimester n(%)	2 nd trimester n(%)	3 rd trimester n(%)
Health promotion diagnoses (code)			
Hydration			
Adequate Hydration (10042065)	2(5.7)	4(10.5)	4(18.2)
Nutrition			
Adherence To Dietary Regime (10030159)	8(22.9)	8(21.1)	5(22.8)
Effective Weight (10027385)	0(0.0)	0(0.0)	1(4.5)
Eliminations			
Promoting Effective Bowel Elimination (10036717)	0(0.0)	0(0.0)	2(9.1)
Sleep/rest			
Adequate Sleep (10024930)	0(0.0)	1(2.6)	0(0.0)
Exercise and physical activity			
Adherence To Exercise Regime (10030163)	1(2.8)	2(5.3)	1(4.5)
Therapy			
Adherence To Therapeutic Regime (10030205)	2(5.7)	5(13.1)	0(0.0)
Negative Laboratory Result*	8(22.9)	2(5.3)	1(4.5)
Reproduction			
No Complication During Pregnancy (10042446)	14(40.0)	16(42.1)	8(36.4)
Risk diagnoses (code)			
Oxygenation			
Risk For Dyspnea*	0(0.0)	0(0.0)	1(6.2)
Nutrition			
Risk For Being Underweight (10037586)	0(0.0)	2(8.3)	0(0.0)
Risk For Deficient Food Intake (10023021)	1(10.0)	0(0.0)	2(12.5)
Risk for Excess Food Intake (10015114)	0(0.0)	5(20.8)	4(25.0)
Eliminations			
Risk for Constipation (10015053)	5(50.0)	9(37.5)	4(25.0)
Risk For Urge Incontinence Of Urine (10026848)	0(0.0)	1(4.2)	0(0.0)
Therapy			
Risk For Disease: Diabetes	0(0.0)	1(4.2)	1(6.2)
Risk For Urinary Tract Infection (10051950)	0(0.0)	3(12.5)	1(6.2)
Reproduction			
Risk For Spontaneous Abortion*	3(30.0)	0(0.0)	1(6.2)
Risk For Complications During Pregnancy: Hypertension *	1(10.0)	3(12.5)	1(6.2)
Risk For Complications During Pregnancy: Anemia*	0(0.0)	0(0.0)	1(6.2)
Diagnoses focusing on the problem (code)			
Hydration			
Impaired Fluid Intake (10029873)	17(17.2)	18(17.8)	10(14.1)
Nutrition			
Impaired Nutritional Intake (10023009)	22(22.3)	21(20.8)	19(26.8)
Excess Food Intake (10000682)	0(0.0)	1(1.0)	1(1.4)
Overweight (10027300)	1(1.0)	1(1.0)	1(1.4)
Obesity (10013457)	0(0.0)	2(2.0)	1(1.4)
Nausea (10013457)	18(18.2)	8(7.9)	3(4.2)
Vomiting (10025981)	9(9.1)	4(3.9)	1(1.4)
Eliminations			
Constipation (10000567)	5(5.0)	4(3.9)	2(2.9)
Excess Vaginal Discharge (10008688)	2(2.0)	3(3.0)	3(4.2)
Sleep/rest			
Impaired Sleep (10027226)	0(0.0)	2(2.0)	10(14.1)
Exercise and physical activity			
Non Adherence To Exercise Regime (10022657)	10(10.1)	6(6.0)	1(1.4)
Body care			
Self Care Deficit (10023410)	0(0.0)	2(2.0)	0(0.0)

Continue...

Continuation.

Nursing diagnoses	1 st trimester n(%)	2 nd trimester n(%)	3 rd trimester n(%)
Skin Integrity			
Impaired Skin Integrity (10001290)	1(1.0)	4(3.9)	0(0.0)
Vascular regulation			
Peripheral Oedema (10027482)	0(0.0)	0(0.0)	1(1.4)
Immune regulation			
Non Adherence To Immunization Regime (10030026)	1(1.0)	3(3.0)	2(2.9)
Perception			
Headache*	2(2.0)	4(3.9)	0(0.0)
Pubic Region Pain*	4(4.1)	8(7.9)	3(4.2)
False Labor Pain (10007549)	0(0.0)	0(0.0)	3(4.2)
Pain Control (10025831)	0(0.0)	1(1.0)	0(0.0)
Inadequate Pain Control (10039910)	0(0.0)	2(2.0)	0(0.0)
Colic*	2(2.0)	0(0.0)	1(1.4)
Vagina Itching*	1(1.0)	0(0.0)	1(1.4)
Environment			
Drug Dependence (10041381)	1(1.0)	1(1.0)	0(0.0)
Tobacco Abuse (10022247)	2(2.0)	3(3.0)	4(5.6)
Therapy			
Non Adherence To Therapeutic Regime (10022155)	1(1.0)	3(3.0)	4(5.6)

*Diagnosis built from primitive terms

ter, No Complication During Pregnancy (42.1%) and Adherence To Dietary Regime (21.1%) stood out; in the third trimester, the most frequent were No Complication During Pregnancy (36.4%) and Adherence To Dietary Regime (22.8%).

The main risk diagnoses in the first trimester were: Risk for Constipation (50.0%) and Risk For Spontaneous Abortion (30.0%); in the second quarter, Risk for Constipation (37.5%) and Risk for Excess Food Intake (20.8%) stood out; in the third quarter, Risk for Constipation (25.0%) and Risk for Excess Food Intake (25.0%) were highlighted.

In the first trimester, the main nursing diagnoses focusing on the problem were: Impaired Nutritional Intake (22.3%) and Nausea (18.2%); in the second quarter, Impaired Nutritional Intake (20.8%) and Impaired Fluid Intake (17.8%) stood out; in the third trimester, Impaired Nutritional Intake (26.8%), Impaired Fluid Intake (14.1%) and Impaired Sleep (14.1%) were frequent.

In the context of psychosocial needs, nursing diagnoses of health promotion, risk and focusing on the problem are presented in table 2.

Among the psychosocial diagnostic titles related to health promotion, in the second and third trimesters, Positive Family Support was proposed, cited twice (8.0%) and four times (50.0%), respec-

Table 2. Nursing diagnoses of health promotion, risk and focused on the problem, by trimester of pregnancy, according to psychosocial needs, presented by Basic Human Needs (n = 36)

Nursing diagnoses	1 st trimester n(%)	2 nd trimester n(%)	3 rd trimester n(%)
Health promotion diagnoses (code)			
Gregarious			
Positive Family Support (10045702)	0(0.0)	2(8.0)	4(50.0)
Risk diagnoses (code)			
Acceptance			
Risk For Unintended Pregnancy (10023182)	2(66.7)	7(28.0)	0(0.0)
Health learning or education			
Impaired Prenatal Care Regime*	0(0.0)	4(16.0)	0(0.0)
Diagnoses focusing on the problem (code)			
Health learning or education			
Lack Of Knowledge Of Disease (10021994)	0(0.0)	1(4.0)	0(0.0)
Low School Attendance (10037777)	0(0.0)	1(4.0)	0(0.0)
Gregarious			
Lack Of Family Support (10022473)	0(0.0)	3(12.0)	1(12.5)
Conflicting Family Attitude (10022456)	0(0.0)	1(4.0)	0(0.0)
Lack Of Social Support (10022753)	1(33.3)	0(0.0)	0(0.0)
Self Esteem			
Situational Low Self Esteem (10000844)	0(0.0)	1(4.0)	0(0.0)
Safety			
Anxiety (10000477)	0(0.0)	1(4.0)	2(25.0)
Reduced Anxiety (10027858)	0(0.0)	1(4.0)	0(0.0)
Fear (10000703)	0(0.0)	2(8.0)	1(12.5)
Reduced Fear (10027889)	0(0.0)	1(4.0)	0(0.0)

*Diagnosis built from primitive terms

tively. No psychosocial health promotion diagnosis was proposed in the first trimester (Table 2).

Risk bonds were described in the first and second trimesters, highlighting Risk For Unintended Pregnancy, mentioned two (66.7%) and seven times (28.0%). Among the diagnostic titles focused on the problem, in the psychosocial area, only Lack Of Social Support (one case, 33.3%) was proposed in the first trimester; in the second trimester, the most common were Lack Of Family Support (three cases, 12.0%) and Fear (two cases, 8.0%) and in the third trimester Anxiety stood out (two cases, 25.0%) (Table 2).

Table 3 refers to the set of diagnoses for Basic Human Needs.

Psychobiological needs were widely identified when compared to psychosocial needs. Regardless of the gestational trimester, the categories of the most frequent diagnostic titles, among the psychobiological needs, were focused on the problem, health promotion, and risk. Considering psychosocial needs, diagnostic titles were slightly more frequent in the second gestational trimester (Table 3).

Table 3. Total diagnostic titles according to psychobiological and psychosocial needs by pregnancy trimester (n = 452)

Diagnoses	1 st trimester n(%)	2 nd trimester n(%)	3 rd trimester n(%)
Psychobiological needs			
Health Promotion	35(23.8)	38(20.2)	22(18.8)
Risk	10(6.8)	24(12.8)	16(13.7)
Focus on the problem	99(67.3)	101(53.7)	71(60.7)
Psychosocial needs			
Health promotion	0(0.0)	2(1.1)	4(3.4)
Risk	2(1.4)	11(5.8)	0(0.0)
Focus on the problem	1(0.7)	12(6.4)	4(3.4)

Discussion

Similarity was identified between the diagnoses present in the three trimesters. This may be due to the fact that only pregnant women at usual risk were included in the study, so that often the diagnoses proposed, regardless of whether they are diagnoses of health promotion, risk or focusing on the problem, were related to physiological changes resulting from normal pregnancy.

It is worth mentioning the small proportion of diagnoses aimed at psychosocial needs and the absence of diagnoses related to psychospiritual needs, a fact that may result from the registration instruments used in nursing consultations: perinatal record and pregnant woman's handbook. Such instruments were proposed by *Rede Cegonha*⁽¹⁰⁾ and, despite the advances provided to the proposal of comprehensive care and adoption of the expanded clinic in prenatal care, it includes little about psychosocial needs and none of the psycho-spiritual needs of pregnant women. This fact signals the need for a closer approximation of models that include different needs, overcoming the biologicist view. The identification of psychosocial and psycho-spiritual needs can be made possible through the use of a theoretical framework, in the nursing consultation, which enables and enhances this expanded perspective, regardless of the registration instrument adopted.

The recognition that economic and social conditions have a decisive influence on the health conditions of people and populations and that most of the burden of disease occurs due to the conditions in which people are born, live, work and age,⁽¹²⁾

may result in the expansion of diagnostic titles related to psychosocial needs. Thus, it is up to city managers to promote the discussion of this theme with health professionals, especially with nurses, in order to adapt the data collection instruments so that this view can be valued in prenatal nursing consultations.

Regardless of the gestational trimester, considering nursing diagnoses for health promotion and focus on the problem, the need for nutrition stood out. Pregnancy is known to be an important period that can influence the well-being of future generations^(13,14) and that nutrition during pregnancy has an impact not only on maternal health, but also on fetal and child health,^(14,15) which makes the practice of healthy eating a goal to be achieved by pregnant women.

Assuming that any risks should be identified in prenatal consultations, aspects related to food should be addressed in all contacts with pregnant women, in order to identify difficulty in offering and accessing food, in addition to the influence that this food suffers from cultural and symbolic factors.⁽¹⁶⁾ Thus, the finding of high frequency of nursing diagnoses associated with the need for nutrition is justified and the understanding of pregnant women regarding its relevance is inferred, due to the high frequency of Adherence To Dietary Regime in the three pregnancy trimesters. Not without difficulty, in contrast, the diagnosis Impaired Nutritional Intake was also listed.

Impaired Nutritional Intake may be, in some way, associated with the Nausea diagnosis, found in this study especially in the first two trimesters of pregnancy. This event, most common during the first weeks of pregnancy, six to eight weeks, until 20th weeks, can occur at any time of the day or night, although it is more frequent in the morning, and affects 85% of pregnant women, being that, in the most severe form of 0.3 to 3%.⁽¹⁷⁾ Moreover, in the context of the need for nutrition, Risk for Excess Food Intake stands out, identified whenever weight gain is higher than expected, calculated from Body Mass Index (BMI) pre-gestational age and considering gestational age. This diagnosis was listed exclusively for the second and third trimester, probably after an improvement in Nauseas.

Impaired Fluid Intake was a common diagnostic title for the three gestational trimesters, and Adequate Hydration was among the most common in the third trimester of pregnancy, when considering health promotion diagnoses, a condition that may also be related to the improvement in Nausea previously mentioned. The role played by water in the body in relation to digestion, metabolism, nutrient transport, maintenance of vascular function and temperature regulation is well known. However, the establishment of intake needs is complex, not only during pregnancy, but also in other stages of life, due to the diversity of human activities and the complexity of the water regulation process in the human body. Thus, guideline international for adequate water intake, proposed by scientific organizations in Europe, China, Australia and the United States of America, recommends that pregnant women receive a total of 2,300 ml of water per day, including food water, estimated at 20%. Thus, the average water intake, indicated 1,840 ml per day, is close to that adopted in this study to indicate Impaired Fluid Intake, which is less than 2,000 ml per day. No study has been identified addressing water intake for the Brazilian population. The European Food Safety Authority points out that among member countries, a significant part of the population drinks less water than recommended.⁽¹⁸⁾

Even if indirectly, Impaired Fluid Intake, is associated with Risk for Constipation, one of the most frequent in the three gestational trimesters when considering the group of risk diagnoses. Constipation is a functional intestinal disorder characterized by pain and discomfort, exertion, hard stools and a feeling of incomplete bowel movement, common during pregnancy: one in three pregnant women has this condition,⁽¹⁹⁾ being this condition more frequent in pregnancy outside of her and having as a relevant risk factor the lack of physical activity, common during pregnancy.⁽²⁰⁾ In this study, being a diagnostic risk title, the criterion for its definition was based on the frequency of evacuation and, thus, all pregnant women who reported an interval between evacuations of two days or more, had such diagnosis pointed out, regardless of other signs or symptoms. In the prenatal fol-

low-up of these cases, there was concern to monitor the progress towards diagnosis with a focus on the problem, with Constipation, which was also identified in the three trimesters of pregnancy, but with less occurrence.

Despite scientific evidence of the benefits that physical activity provides, there is little adherence to it when women enter the pregnancy-*puerperal* cycle. This was a condition found in the present investigation, especially in the first trimester of pregnancy, since approximately 10% of diagnoses focusing on the problem were Non Adherence To Exercise Regime. Some quantitative studies point to the fear, which cannot be justified, of negative repercussions for pregnancy as a cause for this.⁽²¹⁾ On the contrary, favorable outcomes are identified when considering obstetric and fetal aspects. Thus, professionals need to make it clear that the benefits of 150 minutes of physical activity per week, throughout pregnancy, outweigh the risks for the vast majority of pregnant women and do not focus on counseling on contraindications or potential dangers. Women who already practice physical activity should be advised that maintaining high levels of activity is safe and healthy for both mother and baby.⁽²²⁾

Some health promotion diagnoses, among the most frequent in the first and second trimesters, were Negative Laboratory Result and Adherence to Therapeutic Regime, respectively. They indicate the opportunity to develop preventive as well as educational actions, since pregnancy is often the only time women are seen in health services.

Other risk and problem-focused diagnoses did not permeate all trimesters of pregnancy, being found in specific trimesters, such as Risk For Spontaneous Abortion and False Labor Pain and discomfort diagnoses, such as Pubic Region Pain and Impaired Sleep.

Pubic Region Pain can result from numerous causes, it is a common condition and can negatively affect the well-being of pregnant women.⁽²³⁾ During prenatal consultations, reference to this pain deserves attention, which is generally difficult to diagnose, due to the multiple confounding factors associated, even in a normal pregnancy, resulting from anatomical changes in the abdomen and pelvis and

growth uterine. It is noteworthy that the identification of the basic cause and immediate treatment whenever necessary are fundamental to not jeopardize mothers' and fetuses' health.⁽²⁴⁾ Its occurrence should be a warning sign, which may be associated with the risk of miscarriage or premature labor, depending on the time of occurrence, first or third trimester, respectively.

As for sleep disorders, they result from hormonal, physiological, metabolic, psychological and postural changes related to pregnancy. They are common, can be associated with negative outcomes during pregnancy and are often underdiagnosed and treated.⁽²⁵⁾ Considering the possibility of minimizing these symptoms with simple procedures, it is up to professionals to propose nursing actions for this purpose to pregnant women.

In the psychosocial area, the gregarious need was highlighted, especially with nursing diagnoses that referred to family support. The social support network has been emphasized as a relevant aspect for maternal well-being during pregnancy and the birth of children, which can modify outcomes in maternal weight and breastfeeding.⁽²⁶⁾ Health professionals are responsible for introducing the family in prenatal care, which can contribute to maintaining or strengthening families' ties with pregnant women.

Regarding Risk For Unintended Pregnancy, it was described in the first two gestational trimesters. Unplanned pregnancy has been investigated globally. In Brazil, a survey conducted nationwide, showed a rate of 55.4% of women who reported unplanned pregnancies.⁽²⁷⁾ In the United States of America, unplanned pregnancies seem to be on the decline: between 2008 and 2011 the rates were 51% and 45%, respectively, but it remained a frequent event.⁽²⁸⁾ Thus, the occurrence of this risk bond appears to be justified.

Regarding Anxiety and Fear, listed in the second and third trimesters, they may be related to the proximity of childbirth. The prenatal period should be understood as conducive to the development of educational activities that can contribute to pregnant women's physical and emotional preparation for the moment of childbirth and birth.⁽²⁹⁾

Finally, it is noteworthy that the pregnant women included in the present study, of low risk and attended in public primary care services, have a similar profile to the demand attended by nurses in many Brazilian municipalities and, thus, the outcomes can be widely used. For future studies, we suggest investigations using ICNP® to approach nursing interventions, based on these identified diagnoses.

Conclusion

The nursing diagnoses of ICNP® identified in prenatal care in primary care varied little according to the gestational trimester. Diagnoses related to psychobiological needs were more frequent, compared to psychosocial ones, with numerical emphasis on diagnoses focusing on the problem. In usual risk pregnancies, nursing diagnoses described needs for nutrition, hydration, eliminations, therapy and exercise and physical activities. Thus, in summary response, most of the proposed set of diagnoses is in the context of developing healthy lifestyle habits. However, in this process, it is necessary to consider the need to expand the approach to pregnant women, in order to include titles of psychosocial and psychospiritual diagnoses.

Collaborations

Costa ER, Pina MM, Jensen R, Jamas MT and Parada CMGL declare that they contributed to the study design, data analysis and interpretation, writing of the article, relevant critical review of the intellectual content and approval of the final version to be published.

References

1. Penedo RM, Spiri WC. Systematization of nursing care for nurse managers. *Acta Paul Enferm.* 2014;27(1):86–92.
2. Azevedo OA, Guedes ES, Araújo SA, Maia MM, Cruz DA. Documentation of the nursing process in public health institutions. *Rev Esc Enferm USP.* 2019;53:e03471.

3. Conselho Federal de Enfermagem (COFEN). Resolução COFEN Nº 358/2009, de 15 de outubro de 2009 [Internet]. Dispõe sobre a Sistematização da Assistência de Enfermagem em ambientes públicos ou privados, em que ocorre o cuidado profissional de Enfermagem e dá outras providências. Brasília (DF): COFEN; 2009 [citado 2020 Mar 18]. Disponível em: http://www.cofen.gov.br/resoluco-cofen-3582009_4384.html
4. Garcia TR, Bartz CC, Coenen A. CIPE®: uma linguagem padronizada para a prática profissional. Garcia TR, organizador. *Classificação Internacional para a Prática de Enfermagem - CIPE®: aplicação à realidade brasileira.* Porto Alegre: Artmed; 2015. p. 24–36.
5. International Organization for Standardization (ISO). Health informatics: categorial structures for representation of nursing diagnoses and nursing actions in terminological systems (ISO/FDIS 18104: 2014). Geneva: ISO; 2014. [cited 2020 May 28]. Available from: <https://www.iso.org/obp/ui/#iso:std:iso:18104:ed-2:v1:en:sec:A>
6. Félix ND, Ramos NM, Nascimento MN, Moreira TM, Oliveira CJ. Nursing diagnoses from ICNP® for people with metabolic syndrome. *Rev Bras Enferm.* 2018;71 Suppl 1:467–74.
7. de Souza Neto VL, Costa RT, Costa DA, Belmiro SS, Lima MA, Silva RA. Diagnósticos da CIPE® de pessoas vivendo com AIDS e indicadores empíricos. *Rev Bras Enferm.* 2019;72(5):1226–34.
8. Horta WA. *Processo de Enfermagem.* São Paulo: EPU/EDUSP; 1979. 99p.
9. Querido DL, Christoffel MM, Nóbrega MM, Almeida VS, Andrade M, Esteves AP. Terminological subsets of the International Classification for Nursing Practice: an integrative literature review. *Rev Esc Enferm USP.* 2019;53:e03522.
10. Brasil. Ministério da Saúde. Portaria GM nº 1.459, de 24 de junho de 2011: Institui, no âmbito do Sistema Único de Saúde (SUS), a Rede Cegonha. Brasília (DF): Ministério da Saúde; 2011 [citado 2020 Mar 18]. Disponível em: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt1459_24_06_2011.html
11. Garcia TR, Nóbrega MM, Cubas MR. CIPE® versão 2019/2020. Garcia TR (Org). *Classificação Internacional para a Prática de Enfermagem (CIPE): versão 2019/2020.* Porto Alegre: Artmed; 2020. p. 35–236.
12. Carvalho AI. Determinantes sociais, econômicos e ambientais da saúde. Fundação Oswaldo Cruz. *A saúde no Brasil em 2030 - prospecção estratégica do sistema de saúde brasileiro: população e perfil sanitário.* Rio de Janeiro: Fiocruz/Ipea/Ministério da Saúde/Secretaria de Assuntos Estratégicos da Presidência da República; 2013. Vol. 2, p. 19–38.
13. Kariuki L, Lambert C, Purwestri R, Biesalski HK. Trends and consequences of consumption of food and non-food items (pica) by pregnant women in Western Kenya. *NFS J.* 2016;5:1–4.
14. Walsh JM, McAuliffe FM. Impact of maternal nutrition on pregnancy outcome—does it matter what pregnant women eat? *Best Pract Res Clin Obstet Gynaecol.* 2015;29(1):63–78.
15. Marangoni F, Cetin I, Verduci E, Canzone G, Giovannini M, Scollo P, et al. Maternal diet and nutrient requirements in pregnancy and breastfeeding. An Italian consensus document. *Nutrients.* 2016;8(10):E629.
16. Moreira LN, Barros DC, Baião MR, Cunha MB. Quando tem como comer, a gente come: fontes de informações sobre alimentação na gestação e as escolhas alimentares. *Physis.* 2018;28(3):e280321.
17. McParlin C, O'Donnell A, Robson SC, Beyer F, Moloney E, Bryant A, et al. Treatments for hyperemesis gravidarum and nausea and vomiting in pregnancy: a systematic review. *JAMA.* 2016;316(13):1392–401.

18. European Federation of Bottled Waters. Guidelines for adequate water intake: a public health rationale. Proceedings from EFBW Symposium IUNS 20th International Congress of Nutrition Granada, Spain, September 18, 2013. [cited 2020 Sep 18]. Available from: http://www.efbw.eu/fileadmin/EFBW_GuidelinesforAdequateWaterIntake.pdf
19. García Duarte S, Ruíz Carmona M, Camacho Ávila M. Prevention of constipation during pregnancy with the hydration. *Nutr Hosp.* 2015;32(2 Suppl 2):10298.
20. Shi W, Xu X, Zhang Y, Guo S, Wang J, Wang J. Epidemiology and risk factors of functional constipation in pregnant women. *PLoS One.* 2015;10(7):e0133521.
21. Braga DP, Halpern G, Setti AS, Figueira RC, Iaconelli A Jr, Borges E Jr. The impact of food intake and social habits on embryo quality and the likelihood of blastocyst formation. *Reprod Biomed Online.* 2015;31(1):30–8.
22. Garland M. Physical activity during pregnancy: a prescription for improved perinatal outcomes. *J Nurse Pract.* 2017;13(1):54–8.
23. Flack NA, Depledge J, Hay-Smith EJ, Stringer MD, Gray AR, Woodley SJ. A self-report questionnaire for pregnancy-related symphyseal pain. *Musculoskelet Sci Pract.* 2020 A;48:102151.
24. Liddle SD, Pennick V. Interventions for preventing and treating low-back and pelvic pain during pregnancy. *Cochrane Database Syst Rev.* 2015 Sep;9(9):CD001139.
25. Bacaro V, Benz F, Pappaccogli A, De Bartolo P, Johann AF, Palagini L, et al. Interventions for sleep problems during pregnancy: A systematic review. *Sleep Med Rev.* 2020;50:101234.
26. Pujól von Seehausen M, Pérez-Escamilla R, Couto de Oliveira MI, do Carmo Leal M, Siqueira Boccolini C. Social support modifies the association between pre-pregnancy body mass index and breastfeeding initiation in Brazil. *PLoS One.* 2020;15(5):e0233452.
27. Theme-Filha MM, Baldisserotto ML, Fraga AC, Ayers S, da Gama SG, Leal MD. Factors associated with unintended pregnancy in Brazil: cross-sectional results from the Birth in Brazil National Survey, 2011/2012. *Reprod Health.* 2016;13(S3 Suppl 3):118.
28. Finer LB, Zolna MR. Declines in unintended pregnancy in the United States, 2008-2011. *N Engl J Med.* 2016;374(9):843–52.
29. Velho MB, dos Santos EK, Collaço VS. [Natural childbirth and cesarean section: social representations of women who experienced them]. *Rev Bras Enferm.* 2014;67(2):282–9. Portuguese.