

Accuracy of defining characteristics of the nursing diagnosis Ineffective Role Performance

Rhayza Rhavênia Rodrigues Jordão¹, Bárbara Maranhão Calábria Cavalcanti²,
Denise Cibelle Rodrigues Marques³, Jaqueline Galdino Albuquerque Perrelli⁴,
Suzana de Oliveira Manguieira⁵, Fernanda Jorge Guimarães⁶, Iracema da Silva Frazão⁷

¹ Nurse. Resident in Women's Health at Instituto de Medicina Integral Professor Fernando Figueira. Recife, PE, Brazil. E-mail: rhayzajordao@hotmail.com.

² Nurse. Nurse at Hospital da Restauração. Recife, PE, Brazil. E-mail: barbara_calabria@hotmail.com.

³ Nurse. Nurse of the Family Health Strategy. Afogados da Ingazeira, PE, Brazil. E-mail: denise_cibelle@hotmail.com.

⁴ Nurse. Ph.D. in Neuropsychiatry and Behavioral Sciences. Adjunct Professor at Universidade Federal de Pernambuco, Campus Centro Acadêmico de Vitória. Vitória de Santo Antão, PE, Brazil. E-mail: jaquelinealbuquerqueufpe@gmail.com.

⁵ Nurse, Ph.D. in Nursing. Adjunct Professor at Universidade Federal de Pernambuco, Campus Centro Acadêmico de Vitória. Vitória de Santo Antão, PE, Brazil. E-mail: suzanaom@hotmail.com.

⁶ Nurse, Ph.D. in nursing. Adjunct Professor at Universidade Federal de Pernambuco, Campus Centro Acadêmico de Vitória. Vitória de Santo Antão, PE, Brazil. E-mail: ferjorgui@hotmail.com.

⁷ Nurse. Ph.D. in Social Services. Adjunct Professor at Universidade Federal de Pernambuco, Campus Recife. Recife, PE, Brazil. E-mail: isfrazao@gmail.com.

Received: 07/12/2016.

Accepted: 03/03/2017.

Published: 05/15/2017.

Suggest citation:

Jordão RRR, Cavalcanti BMC, Marques DCR, Perrelli JGA, Manguieira SO, Guimarães FJ, et al. Accuracy of defining characteristics of the nursing diagnosis Ineffective Role Performance. Rev. Eletr. Enf. [Internet]. 2017 [cited __/__/__];19:a10. Available from: <http://dx.doi.org/10.5216/ree.v19.42306>.

ABSTRACT

The study objective was to verify the accuracy of the defining characteristics of the nursing diagnosis Ineffective Role Performance in pregnant women. This is an accuracy diagnosis study conducted with 58 women attended in Family Health Units (FHU). We used a tracking scale for Postpartum Depression to identify the defining characteristics of the referred diagnosis. We calculated sensitivity, specificity measures, and their respective confidence intervals. The Ineffective Role Performance was present in 50.0% of participants. The defining characteristics Inadequate adaptation to change, Insufficient self-management, and Alteration in role perception simultaneously presented, significant sensitivity and specificity, in statistical terms. Therefore, such clinical indexes were more accurate to verify the nursing diagnosis Ineffective Role Performance in pregnant women.

Descriptors: Nursing Diagnosis; Nursing; Role Playing; Maternal-Child Nursing; Postpartum Period.

INTRODUCTION

The birth of a child implicates profound organic and psychological changes in the woman, due to the requests directed to the care towards the baby. Breastfeeding the child and the bond establishment is few of the specific maternity actions⁽¹⁾. Such attributions are modeled by the sociocultural expectation and maternal self-perception⁽²⁻³⁾ and require physical and emotional involvement from the woman⁽⁴⁻⁵⁾.

During the postpartum period, the risk of the pregnant woman to develop Mental Disorders or to present some level of psychic suffering increases substantially⁽¹⁾. Thus, it is likely that the woman will

find difficulties in assuming her role, once to efficiently transit over the change of roles is intimately related to her mental health⁽⁴⁾.

Despite the importance of the early diagnosis, many women with some level of mental suffering are not correctly diagnosed, particularly at primary care. This can be related to the assistance provided that is focused on the pregnancy and postpartum physiological aspects. And, to the difficulty of the health professional to measure symptoms, overall when they are related to the human psyche^(1,6).

Among the health professionals closer to the woman, the nurse has a unique position, as the nurse performs a series of attributions involving the accompaniment during the pregnancy-puerperal cycle which, allows identifying care demands related to the woman's mental health and with the maternal role performance.

From this perspective, there is the classification use of Nursing Diagnoses from NANDA-I, as a working tool for the nurse. It designs and describes human answers of subjects with a physical or psychic suffering, as well as, they can be present in the context of disease absence and, are related to positive behaviors when searching for health⁽⁷⁾.

Within nursing phenomenon relative to maternity, the NANDA-I presents the diagnosis Ineffective Role Performance defined as "patterns of behavior and self-expression that do not match the environmental context, norms, and expectations". It is composed of 31 Defining Characteristics (DC) and 25 Related Factors (RF)⁽⁷⁾.

With the intention to allow a nursing care based on reliable evidence, this study focuses on the verification of the precision of the DCs of the referred nursing phenomenon. Studies of diagnostic accuracy in nursing are recent, and they have been performed to validate clinical indicators of a nursing diagnosis (ND). The validity of a ND is recognized as the level that it represents a true condition to the client. Some models are recommended to validate a nursing diagnosis. The most recent model, proposed by Lopes, Silva, and Araújo in 212, presents a three-step methodology: a concept analysis, content analysis by specialists and, accuracy of clinical indicators analysis, with higher methodological and statistical analysis rigor⁽⁸⁾.

Different nursing diagnoses is submitted to assessment for various motives, such as, to analyze its indicators, to verify its content, to identify if the diagnosis is adequate in various contexts. There are studies with nursing diagnoses dysfunctional family processes⁽⁹⁾, ineffective airway clearance⁽¹⁰⁾ and willingness for improved infant development⁽¹¹⁾.

In this study, we opted to analyze the nursing diagnosis Ineffective Role Performance in a particular population (puerperal), understanding that we expect the development of functions in this group, which might not be satisfied. In clinical practice, it is seen that difficulties to develop the maternal role results in anxiety, guilt and impotence feelings. Thus, it is necessary to identify which characteristics are more precise to attribute the occurrence of the referred nursing diagnosis in this population.

Thus, the aim of this study was to investigate the accuracy of a conjunct of DCs of the diagnosis Ineffective Role Performance in the context of puerperal attended in Family Health Units (FHU).

METHODS

This is a diagnostic accuracy study conducted with women during their puerperal period attended in four FHUs located at the inner state of Pernambuco. The respective health units developed actions towards women's care in the fields of uterine cervix cancer prevention, prenatal and family planning.

To estimate the sample size, we used the following parameters: Z_{α} of 1.96, referring to the confidence level of 95%; $V(v)$ refers to the main accuracy variance for the study. We considered a sensibility of 85%. To calculate this measure, we multiplied the value established by its complement. Thus, we had: $V = Se \times (1-Se) = 0.85 \times 0.15 = 0.1275$; L refers to the extension of the confidence interval to be built for each measure. We adopted the value 0.50 (50.0%), considering that it was not possible to estimate the occurrence percentage for the diagnosis Ineffective Role Performance in puerperal women. We calculated the estimate based on the following formula:

$$n = \frac{Z_{1-\alpha/2}^2 \cdot V(v)}{L^2 \cdot P}$$

From this calculation, we obtained 58 participants who were consecutively selected, at the measure that the met the following inclusion criteria: puerperal women aged 18 to 49 years, literate, and who were between two and twenty-six postpartum weeks⁽¹²⁾. The newborn death during data collection was the only exclusion criterion.

The data were collected through interviews, during February and March of 2011, in childcare consultation or at the participant's house in a private environment, to guarantee privacy and secrecy of collected information. The interview lasted an average of 30 minutes.

To characterize the sample, we used a questionnaire with socioeconomic and obstetric variables. About the DCs identification, we applied the translated and validated version⁽¹²⁾ of Postpartum Depression Screening Scale (PDSS), developed by Beck and Gable in 2000.

The scale contains 35 items assessing seven dimensions: sleep/appetite disorders, anxiety/safety, emotional lability, cognitive impairment, self-loss, guilt/shame and intention to self-harm. It is a self-reported Likert-type five-point scale (1 – Totally disagree; 2 – Disagree; 3- Neither disagree nor agree; 4 – Agree, and 5 – Totally agree). To complete the scale, women were guided to mark the item that better identified with her humor state in the past two weeks. The cut-point⁽¹²⁾ for the indication of symptoms was 102.

We selected the PDSS to be the standard reference instrument to assess DCs, due to its internal consistency (overall Cronbach's alpha coefficient of 0.95)⁽¹²⁾ and it presents compatible items with the ND Ineffective Role Performance. After checking the compatibility between DCs and scale indicators, we included the following characteristics in the study: Ineffective adaptation to change, Role Ambivalence, Anxiety, Insufficient self-management, Depression, Ineffective coping strategies, Powerlessness, Role dissatisfaction, Insufficient motivation, Change in self-perception of role, Alteration in role perception, Pessimism and Role

strain. We considered Role conflict and Role ambivalence as one characteristic.

We excluded the DCs harassment, system conflict, ineffective role performance, inappropriate development expectations and changes in others' role perception, as they did not seem appropriate for our study. Although Insufficient external support for role enactment, insufficient knowledge of role requirements and, insufficient opportunity for role enactment were DCs proposed by NANDA-I for the studied ND, we believe that they are related factors to Ineffective Role Performance. Thus, we did not assess them in our study.

The DCs insufficient confidence, role confusion, discrimination, insufficient skills, uncertainty, Change in capacity to resume role, Changes in usual pattern of responsibility, Role denial and domestic violence did not correspond with the PDSS items, therefore, they were not verified. Finally, we investigated 13 characteristics.

We considered the DC present when a group of PDSS items in the scale corresponding to a determined characteristic presented a score of four (Agree) or five (Totally agree).

The presence of the diagnosis Ineffective Role Performance was attributed from the clinical judgment of two nurses with clinical and academic experience in women's health during the pregnancy-puerperal cycle and, systematizing of nursing assistance. In the case of disagreement about the presence or absence of the ND between the two, a third nurse was invited to evaluate the phenomenon.

We collected the data and organized them in an Excel spreadsheet, and we analyzed the data using the Statistical Package for the Social Sciences (SPSS) version 17.0 for Windows.

We used the Chi-Squared test to verify the association between characteristics and nursing diagnosis, in frequencies lower than 20 and higher than five, and the Fisher's exact test in the expected frequencies lower than five. We applied the significance level (α) of 0.05 in these tests.

Regarding the accuracy analysis, we calculated sensitivity and specificity measures, positive predictive value (PPV) and negative predictive value (NPV). We assessed such measures from their confidence intervals.

The research was approved by the Ethics in Research with Human Beings Committee of the Health Sciences Center at Universidade Federal de Pernambuco (CEP/CCS/UFPE), under the protocol 324/2011. We respected all aspects referring to research with human beings, according to the resolution 466/12. We informed participants about the study objectives and possible questions about their maternal role. Those who agreed to participate in the study voluntarily signed the Free and Informed Consent Term.

RESULTS

The mean puerperal age was 25.41 years (\pm 5.80). Only 11.0% reported not to have a stable relationship. Regarding education, 41% reported more than ten study years. About family income, 34% reported monthly income between two to three minimum wages and, 43% had some paid activity. About the obstetric history, 14% did not wish the pregnancy, and 17% reported losing a child through abortion.

The nursing diagnose Ineffective Role Performance was present in 50.0% of the sample. Women

presented the following DCS: Anxiety (65.5%), Ineffective adaptation to change (43.1%), Insufficient self-management (41.1%), Alteration in role perception (37.9%), Ineffective coping strategies (32.8%), Insufficient motivation (27.6%), Caregiver role strain (27.6%), Impotence (25.9%), Role dissatisfaction (13.8%), Pessimism (12.1%), Change in self-perception of role (10.3%), Depression (6.9%) and Role ambivalence (6.9%).

The Ineffective Role Performance did not present a statistically significant association with the characteristics Role Ambivalence, Anxiety, and Depression. Table 1 contains data of tests used to verify these associations.

Table 1: Association between the nursing diagnose Ineffective Role Performance and its defining characteristics in puerperal. Vitória de Santo Antão, PE, Brazil, 2011.

Defining characteristics		Ineffective Role Performance		P Value
		Present	Absent	
Innefective adaptation to change	Present	22	3	0.000†
	Absent	7	26	
Insufficient self-management	Present	24	0	0.000*
	Absent	5	29	
Role ambivalence	Present	5	0	0.052*
	Absent	24	29	
Anxiety	Present	22	16	0.097†
	Absent	7	13	
Depression	Present	4	0	0.112*
	Absent	25	29	
Ineffective coping strategies	Present	17	2	0.000†
	Absent	12	27	
Powerlessness	Present	15	0	0.000*
	Absent	14	29	
Role dissatisfaction	Present	8	0	0.004*
	Absent	21	29	
Insufficient motivation	Present	15	1	0.000†
	Absent	14	28	
Change in self-perception of role	Present	6	0	0.023*
	Absent	23	29	
Alteration in role perception	Present	22	0	0.000*
	Absent	7	29	
Pessimism	Present	7	0	0.010*
	Absent	22	29	
Role strain	Present	16	0	0.000*
	Absent	13	29	

† Chi-Squared Test

* Fisher's Exact Test

About the accuracy measures, the characteristics Insufficient self-management presented higher sensitivity value. All characteristics presented high specificity level, except Anxiety. However, only the DCs ineffective adaptation to change, insufficient self-management and changed in self-perception of role, presented sensitivity and specificity simultaneously, with statistically significant values (Confidence intervals above 0.5). Table 2 presents other information.

Table 2: Defining accuracy measures of the Nursing Diagnosis Ineffective Performance
Role in puerperal. Vitória de Santo Antão, PE, Brazil, 2011.

Defining characteristics	SE%	CI%	SP%	CI%
Inadequate adaptation to change	75.9	64.9 – 86.9	89.7	81.9 – 97.5
Role ambivalence	17.2	7.5 – 26.9	100.0	100.0 - 100.0
Anxiety	75.9	64.9 – 86.9	44.8	32.0 – 57.6
Insufficient self-management	82.8	73.1 – 92.5	100.0	100.0 – 100.0
Depression	13.8	4.9- 22.7	100.0	100.0 – 100.0
Ineffective coping strategies	58.6	45.9 – 71.3	93.1	86.6 – 99.6
Powerlessness	51.7	38.8 – 64.6	100.0	100.0 – 100.0
Role dissatisfaction	27.6	16.1 – 39.1	100.0	100.0 – 100.0
Insufficient motivation	51.7	38.8 – 64.6	96.6	91.9 – 101.3
Change in self-perception of role	20.7	10.3 – 31.1	100.0	100.0 – 100.0
Alteration in role perception	75.9	64.9 – 86.9	100.0	100.0 – 100.0
Pessimism	24.1	13.1 – 35.1	100.0	100.0 – 100.0
Role strain	55.2	42.4 – 68.0	100.0	100.0 – 100.0

DC: Defining characteristic; SP: Specificity; CI: Confidence interval; SE: Sensitivity.

DISCUSSION

About the sample characteristics, we observed an approximate mean age of 25 years, young women in fertile age, the majority had a partner, completed high school and, they had a paid activity with an income of one to three minimum wages.

Young women had higher chance to develop ambivalent feelings, such as cry, low self-esteem, dissatisfaction with relationships, especially during their first pregnancy. These factors can contribute to the appearance of depressive symptoms, stress and, consequently, they can cause difficulties in performing the maternal role⁽¹³⁾.

The partner's support positively reflects in the role performance, as it promotes positive self-perception, more knowledge about parenting⁽¹⁴⁾, less stress and depressive episodes⁽¹⁴⁾. However, the low maternal education level is a factor that reduces the woman's resilience, self-esteem and self-trust to perform their role, besides being associated with low levels of maternal knowledge⁽¹³⁾.

About their occupation, we found 43% of the sample performing paid activities. Thus, puerperal need to conciliate many attributions and, socially, it is expected their successful execution. This situation can generate role conflicts, anxiety, guilt and impotence, besides anguish involving the separation from the baby^(4,15).

Regarding obstetric data, 17% reported a loss of a child, especially through spontaneous abortion. In this situation, guilt feelings are commonly associated with depression and anxiety, impeding the woman's adaptation^(16,17).

We observed that most participants desired the pregnancy. Although it decreases the chance of rejecting the child, the woman's desire to get pregnant does not constitute a protecting factor against women's incapability, guilt feelings and even the development of depressive episodes⁽⁴⁾.

About accuracy measures, the characteristics Ineffective adaptation to change, Insufficient self-management and Change in self-perception of role conjunctively presented significant statistical values for

sensitivity and specificity. We did not find a statistical association between Ineffective role performance and the DCs Role ambivalence, Anxiety and Depression. However, the literature has presented these indicators as risk factors associated with the women's difficulty to perform maternity.

The perfect mother image is widely worshiped in our society, but not always match with the reality experienced during maternity. The woman faces responsibilities requiring many re-adaptations, overall in the psychic dimensions⁽²⁾. These role transformations can be potential intrinsic stressors when the child is born, and they awaken feelings of maternal anxiety, besides altering her capacity to adapt to new situations^(17,18).

Anxiety, with maternal depression symptoms, have been associated with women's beliefs about maternity, including issues of adaptation to this new context^(19,20).

When they cannot transit within changes and execute care according to expectations, these women frequently feel frustrated and guilty. These feelings can result in excessive concern^(4,5) and directly interfere with its role performance. But even when facing this circumstance, it is possible to have a harmonious puerperal outcome. The anxiety decrease depends on few factors, noting the resilience of the woman herself and the events that occurred during pregnancy and delivery, that are determinants for its progressive adaptation⁽²¹⁾.

Thus, to infer the diagnosis Ineffective Role Performance, it is necessary to assess the woman's life context, as well as her predisposition to overcome existing conflicts. Therefore, in our study, Anxiety was not a good predictor of the diagnosis presence. Thus, it is important to assess this phenomenon with other factors associated to mothering.

The woman's self-comprehension consists of an essential element for her performance. When her efficacy judgment as a mother is positive, women feel more confident and stimulated to perform their activities. The contrary effect comes out when they negatively perceive themselves. Therefore, changes in the role perception have a large influence over the studied diagnostic^(22,23).

The emotional ambivalence can frequently be observed during postpartum. Fluctuating feelings between love and hate generate feelings of not having control over their emotions. Guilt and shame to assume them influence their capacity to face their expectations. Insufficient self-management during puerperal period comes from the lack of maternal preparation in dealing with emotional impulses⁽⁴⁾.

Tied to the loss of self-control, the puerperal can experience impotence feeling consisting of the belief that none of her actions will change the outcome of an individual situation and, thus, does not execute it⁽⁸⁾. In this context, women tend to become dependents of other people's help to care for the baby. Besides, they express doubt, fear and incapacity in everyday situations⁽²⁴⁾.

Differently, when the woman acts in an adverse situation intended to resolve it, but her answers are not enough to control stressors, it is considered that the woman presents Ineffective Coping Strategies⁽⁸⁾. The consequences in the role performance are widely negative, as they result in passivity and loss of self-confidence⁽²⁴⁾.

Impotence and Ineffective coping feelings, besides presenting themselves in different ways in the mother, produce similar effects, as decrease of the maternal stimulus regarding problem resolution and incapacity to meet role expectations⁽⁸⁾.

The conjunct of the changes mentioned above can lead the puerperal to develop situational low self-esteem and pessimism. Both reflect a disturbed emotional state due to the defeated and negative view that the puerperal have of herself and her relationships. Women showing pessimist feelings tend to develop more irritability, depression and sleep disorders^(24,25).

The characteristic Depression was identified only in four women, and it did not present a statistically significant relationship with the diagnostic. However, studies reveal that depressive feelings can change women's self-perception, besides creating conflicts in their family relationships. Thus, this can impede the exercise of attributions inherent of maternity and, as a consequence, to interfere with the efficacy of maternal role^(1,4,21).

CONCLUSION

The Ineffective Role Performance was present in more than 50.0% of women. The characteristics Ineffective adaptation to change, Insufficient self-management and Alteration in role perception were more accurate to measure the diagnosis. Additionally, Role ambivalence, Anxiety, and Depression were not statistically significantly associated with the referred phenomenon.

The nursing assistance should prioritize women's mental health promotion, overall, regarding the proposition of strategies to help them deal in an adaptive manner to the maternal attributions. The results of our study show the need for nurses to assess the puerperal in everyday situations, even in the absence of depressive or anxiety symptoms, in a way to plan effective strategies to contribute to the woman to effectively perform her maternal role.

The findings of this investigation are limited to a sample of 58 puerperal attended at the primary care in the inner state of Pernambuco. We assessed only characteristics associated to PDSS, thus making this study susceptible to incorporation bias.

Thus, we recommend more research with larger samples, using other instruments that contemplate all appropriate DCs to a maternal context, to assess the accuracy of these clinical indicators to measure the diagnosis Ineffective Role Performance.

REFERENCES

1. Vieira F, Bachion MM, Salge AKM, Munari DB. Diagnósticos de enfermagem da NANDA no período pós-parto imediato e tardio. Esc. Anna Nery [Internet]. 2010 [acesso em: 18 dez 2016]; 14(1): 83-89. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-81452010000100013&lng=en.
2. Stelin RMR, Monteiro CFA, Albuquerque RA, Marques CMXC. Processos de construção de maternagem. Feminilidade e maternagem: recursos psíquicos para o exercício da maternagem em suas singularidades. Estilos da clinica 2011; 16(1): 170-85.

3. Santos KD, Motta IF. The meaning of motherhood for three young mothers: a psychoanalytic study. *Estudos de Psicologia* 2014; 31(4): 517-525.
4. Almeida MS, Nunes MA, Camey S, Pinheiro AP, Smidith MI. Mental disorders in a sample of pregnant women receiving primary health care in Southern Brazil. *Cad. Saúde Pública* [Internet]. 2012 [acesso em: 18 dez 2016]; 28(2): 385-394. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2012000200017&lng=en.
5. Carmona EV, Coca KP, Vale IN, Abrão ACFV. Mother role conflicts in studies with mothers of hospitalized newborns: an integrative review. *Rev. esc. enferm. USP* [Internet]. 2012 [acesso em: 18 dez 2016]; 46(2): 505-512. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-62342012000200032&lng=en.
6. Meira BM, Pereira PAS, Silveira MFA, Gualda DMR, Santos JHPO. Challenges for primary healthcare professionals in caring for women with postpartum depression. *Texto contexto - enferm.* [Internet]. 2015 [acesso em: 19 dez 2016]; 24(3): 706-712. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072015000300706&lng=pt.
7. Herdman TH. Diagnóstico de Enfermagem da NANDA: definições e classificações. 2015-2017. Porto Alegre: Artmed; 2015.
8. Lopes MVO, Silva VM, Araujo TL. Methods for Establishing the Accuracy of Clinical Indicators in Predicting Nursing Diagnoses. *International Journal of Nursing Knowledge* 2012;23(3):134-9.
9. Mangueira SO, Lopes MVO. Clinical validation of the nursing diagnosis of dysfunctional family processes related to alcoholism. *J Adv Nurs.* 2016; 72(10): 2401-12.
10. Chaves DBR. et al. Características definidoras do diagnóstico de enfermagem "desobstrução ineficaz de vias aéreas". *Rev. Bras. Enferm.* [Internet]. 2016 Fev [acesso em: 18 dez 2016]; 69(1): 102-109. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672016000100102&lng=pt.
<http://dx.doi.org/10.1590/0034-7167.2016690114j>.
11. Monteiro FPM, Araujo TL, Costa FBC, Leandro TA, Flávia Paula Magalhães, Araujo Thelma Leite de, Costa Francisca Bertilia Chaves, Leandro Telma Alteniza, Cavalcante TF, Lopes MVO. Validação clínica do diagnóstico de enfermagem "Disposição para desenvolvimento melhorado do lactente". *Rev. Bras. Enferm.* [Internet]. 2016 Oct [acesso em: 18 dez 2016]; 69(5): 855-863. Disponível em: <http://dx.doi.org/10.1590/0034-7167-2015-0131>.
12. Cantilino A, Carvalho JA, Maia A, Albuquerque C, Cantilino G, Sougey EB. Translation, validation and cultural aspects of postpartum depression screening scale in Brazilian Portuguese. *Transcult Psychiatry.* 2007; 44(4):672-84.
13. Bornstein MH, Cote LR, Haynes OM, Hahn CS, Park Y. Parenting knowledge: experiential and sociodemographic factors in European American mothers of young children. *Dev Psychol.* 2010; 46(6): 1677-93.
14. Konradt CE, Silva RA, Jansen K, Vianna DM, Quevedo LA, Souza LDM, et al. Postpartum depression and perceived social support during pregnancy. *Rev. psiquiatr. Rio Gd. Sul* [Internet]. 2011 [acesso em: 18 dez 2016]; 33(2): 76-79. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0101-81082011000200003&lng=en.
15. Heleno MG. Eficácia adaptativa de mulheres com história de abortamento, pacientes de um Ambulatório de Reprodução. *Arq. bras. psicol.* [Internet]. 2010 [acesso em: 18 dez 2016]; 62(3): 33-41. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1809-52672010000300005&lng=pt.
16. Benute GRG, Nomura RMY, Pereira PP, Lucia MCS, Zugaib M. Abortamento espontâneo e provocado: ansiedade, depressão e culpa. *Rev Assoc Med Bras* 2009; 55(3): 322-7.
17. Flores MR, Souza APR, Moraes AB, Beltrami L. Associação entre indicadores de risco ao desenvolvimento infantil e estado emocional materno. *Rev. CEFAC* [Internet]. 2013 [acesso em: 18 dez 2016]; 15(2): 348-360. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1516-18462013000200011&lng=en.
18. Sockol LE, Epperson CN, Barber JP. The relationship between maternal attitudes and symptoms of depression and anxiety among pregnant and postpartum first-time mothers. *Arch Womens Ment Health* 2014; 17(3): 199-212.
19. Sockol LE, Battle CL. Maternal attitudes, depression, and anxiety in pregnant and postpartum multiparous women. *Arch Womens Ment Health* 2015; 18(4): 585-593.
20. Beretta MIR, Zaneti DJ, Fabbro MRC, Freitas MA, Ruggiero EMS, Dupas G. Tristeza/depressão na mulher: uma abordagem no período gestacional e/ou puerperal. *Rev. Eletr. Enf.* [Internet]. 2008 [acesso em: 18 dez 2016]; 10(4):966-78. Disponível em: <http://www.fen.ufg.br/revista/v10/n4/v10n4a09.htm>.
21. Navarro C, Navarrete L, Lara MA. Factores asociados a la percepción de eficacia materna durante el posparto. *Salud Mental* [Internet]. 2011 [acesso em: 18 dez 2016]; 34(1): 37-43. Disponível em: <http://www.inprf-cd.gob.mx/pdf/sm3401/sm340137.pdf>.

22. Moura ECC, Fernandes MA, Apolinário FIR. Maternal perception about postpartum psychiatric disorders: implications in mother-child relationship. *Rev Bras Enferm*. [Internet]. 2011 [acesso em: 18 dez 2016]; 64(3): 445-50. Disponível em: <http://www.scielo.br/pdf/reben/v64n3/v64n3a06.pdf>.
23. Darvill R, Skirton H, Farrand P. Psychological factors that impact on women's experiences of first-time motherhood: a qualitative study of the transition. *Midwifery* 2010; 26(3): 357-366.
24. Monteserrat VG. Trastornos del estado de ánimo en el puerperio: factores psicosociales predisponentes. Madrid. Tese [Doutorado] - Universidad Complutense de Madrid; 2010.
25. Seimyr L, Welles-Nyström B, Nissen E. A history of mental health problems may predict maternal distress in women postpartum. *Midwifery* 2013; 29 (2): 122-131.