ORIGINAL ARTICLE

Primary care follow-up of recent mothers submitted to cesarean section and their newborns in reference service

Seguimento em atenção primária de puérperas submetidas à cesariana e seus recém-nascidos de serviço de referência

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ABSTRACT

Objective: To investigate the following up of parturients undergoing cesarean delivery and their newborns (RN), emphasizing the achievement of health care actions in primary health care. **Methods:** follow-up observational study on recent mothers and their RNs after cesarean delivery at the General Hospital at the Federal University of Minas Gerais, performed from March of 2010 to March of 2011. The information was obtained through telephone contact with the recent mothers and analyzed in the Statistical Package for Social Sciences software. The study was approved by the Research Ethics Committee of the Institution. **Results:** 500 (65.6%) out of 762 women undergoing Cesarean delivery were contacted, 126 (25.2%) were assisted in Basic Health Units (UBS) until 30 days postpartum and 34 (6.8%) had notified surgical wound infection. Post-discharge follow-up information was obtained for 456 RNs, excluding 21 deaths or stillbirths and 23 children who remained hospitalized. The recent mothers reported the following health actions for their children: 327 (71.7%) with consultation until 30 days postpartum, 439 (96.3%) with anti-hepatitis B vaccination, 428 (93.9%) with BCG vaccination, 450 (98.7%) with "foot test", and 147 (32.2%) with hearing screening. There was no statistical difference in maternal and child health assistance when the post-cesarean surgical wound infection was considered. **Conclusions:** a low percentage of women was assisted in the UBSs; the majority of RNs had access to health actions and less adherence to the hearing screening.

Key words: Infant, newborn; Cesarean section; Maternal-Child Health Services; Postoperative Care; Primary Health Care.

RESUMO

Objetivo: *investigar o seguimento de parturientes submetidas à cesárea e seus recém-nascidos (RN), ressaltando a realização de ações de saúde em atenção primária.* ***Métodos:*** *estudo observacional de seguimento de puérperas e seus RNs, após parto cesáreo no Hospital das Clínicas da Universidade Federal de Minas Gerais, realizado de março de 2010 a março de 2011. As informações foram obtidas por meio de contato telefônico com as puérperas e analisadas no Statistical Package for Social Sciences. O estudo foi aprovado pelo Comitê de Ética em Pesquisa da instituição.* ***Resultados:*** *foram contatadas 500 (65,6%) das 762 mulheres submetidas a parto cesáreo, 126 (25,2%) assistidas em Unidades Básicas de Saúde (UBS) até 30 dias pós-parto e 34 (6,8%) tiveram infecção de ferida cirúrgica notificada. Obteve-se informação sobre o seguimento pós-alta de 456 RNs, excluindo-se 21 óbitos ou natimortos e 23 crianças que permaneciam internadas. As puérperas informaram as seguintes ações de saúde para seus filhos: 327 (71,7%) com*

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consulta até 30 dias pós-parto, 439 (96,3%) com vacina anti-hepatite B, 428 (93,9%) com BCG, 450 (98,7%) com realização do "teste do pezinho" e 147 (32,2%) com triagem auditiva. Não houve diferença estatística na assistência materno-infantil quando considerada a infecção da ferida cirúrgica pós-cesárea. ***Conclusões:*** *baixo percentual de mulheres foi assistido em UABs; a maioria dos RNs teve acesso às ações de saúde e menos adesão à triagem auditiva.*

Palavras-chave: *Recém-nascido; Cesárea; Serviços de Saúde Materno-Infantil; Cuidados Pós-operatórios; Atenção Primária à Saúde.*

INTRODUCTION

The integral assistance to the mother-child binomial starts with the prenatal follow-up and assistance at childbirth and postpartum, which must be conducted in an integrated way between the different levels of assistance. In the primary care context, pregnant women must be followed-up systematically and all needed and recommended propaedeutic should be offered. In the case of follow-up needed at the time of childbirth, parturients are guided to seek the reference maternity of their region.[1,2]

After childbirth, health community agents identify the return of puerperae and their newborns (NB) to their homes, restarting the primary care follow-up. In addition to the clinical examination of mother and NB, early routine public health actions are conducted on the fifth day of life including guarantee vaccination (if not administered in the maternity), breastfeeding evaluation, the 'little foot' screening test (sickle cell anemia, hypothyroidism, phenylketonuria, and cystic fibrosis), and scheduling for hearing screening, if not already conducted in the maternity ward.[1,3,4]

Despite the greater access of pregnant women to prenatal care and improvements in childbirth assistance, there are difficulties for the integration between basic and tertiary assistance services, especially because the deficiency in reference and counter-reference among sectors involved in healthcare.[5,6] There is also a high cesarean section rates observed, especially in maternity wards for high-risk pregnancies, which increases morbidity and mortality for the parturient women and puerperae, especially related to surgical wound infections (IFC).[7-9] Thus, these patients have mandatory postpartum follow-up such as determined for patients who underwent surgery.[10] The care and assistance toward the NB can be also harmed when complications occur in the puerpera.

The objective of this study was to evaluate the clinical follow-up and assistance in primary care services of puerperae who underwent cesarean section, and their NBs, in a reference university hospital, including the evaluation of preventive health actions recommended by the Ministry of Health.

METHODS

This was an observational prospective study for the follow-up of puerperae and their newborns after cesarean section delivery carried out at the General Hospital of the Federal University of Minas Gerais (HC/UFMG) and tertiary reference for healthcare services in the city of Belo Horizonte and State of Minas Gerais, from March 2010 to March 2011.

Because the hospital assists a high-risk population, the follow-up of pregnant women undergoing cesarean section is performed as part of an active surveillance of 30 days post-surgical postpartum mandatory care according to the technical standard based on the National Healthcare Safety Network.[10] In addition, information about the postpartum care follow-up in the basic health units (UBS) was collected with information about NBs to evaluate their insertion in the UBS.

All patients who underwent a cesarean section childbirth in the reference maternity and their newborns followed by active surveillance were included. The exclusion criteria were not agreeing in participating in the study or having a dead NBs or NBs remaining at the Progressive Care Neonatal Unit (UNCP) in the maternity. Follow-up was lost when telephone contact with those puerperae was not possible; information was obtained from 456 mother-child binomial for this comparative statistical analysis.

After discharge, telephone calls to obtain information after childbirth were performed by trained and supervised students in addition to active searches in medical charts. The follow-up was conducted with telephone calls at 15 and 30 days to identify information about the early and late puerperal period, respectively. Data collection included information about assistance at the UBSs, preventive recommended actions (vaccination, universal neonatal screening, and hearing screening), and main complications in puerperae and NBs.

The database was built in the Statistical Package for Social Sciences (SPSS) version 19.0. In the statistical analysis, frequencies and percentages for categorical variables were described as well as median

and range of continuous variables. The comparative analysis considered the Chi-square test or Fisher's exact test, with statistical significance if $p<0.05$.

This study was approved by the Ethics Committee in Research of the Federal University of Minas Gerais (ETIC 476/10).

RESULTS

Out of 2,604 deliveries during the studied period, 762 (29.3%) pregnant women were submitted to cesarean and 500 (65.6%) were contacted by phone after delivery (Figure 1). The length of hospital stay before discharge showed a median of three days (ranging from one to 29 days) (Figure 2).

Out of the 500 contacted puerperae, 27 (5.4%) received medical care after discharge within up to 15 days after delivery, and 126 (25.2%) were assisted within 30 days in UBSs. The other 347 women did not receive assistance during the follow-up period.

Out of the 500 cesarean section in which contact with patients was possible, six were twin births, with a total of 506 newborns. In five cases, newborns were stillborn, and 16 NBs died within 30 postpartum days (Figure 1).

Considering the 21 neonatal death and stillbirth cases, the median gestational age was 38 weeks (ranging from 28 to 41 weeks) and a median weight of 2.465 g (ranging from 440 to 4. 015 g) (Figure 3).

The 16 NBs who remained in the unit died with the median of one day of life (ranging from 0 to 27 days) (Figure 4). The 13 deaths occurred in the first seven days of life and seven of them on the first day of life.

The coefficient of neonatal mortality among followed-up patients was 31.6 deaths per 1,000 live births (16 in 506 live births), with an early mortality coefficient of 25.7 per 1,000 and late mortality coefficient of 5.9 per 1,000 live births.

On the 30th postpartum day, 23 NBs remained hospitalized at the UNCP. Thus, considering the follow-up of 456 puerperae who were discharged with their children, 327 (71.7%) of them reported having taken their children to pediatric consultation. The median time for NB assistance in the UBSs was 11 days (ranging from two to 30 days).

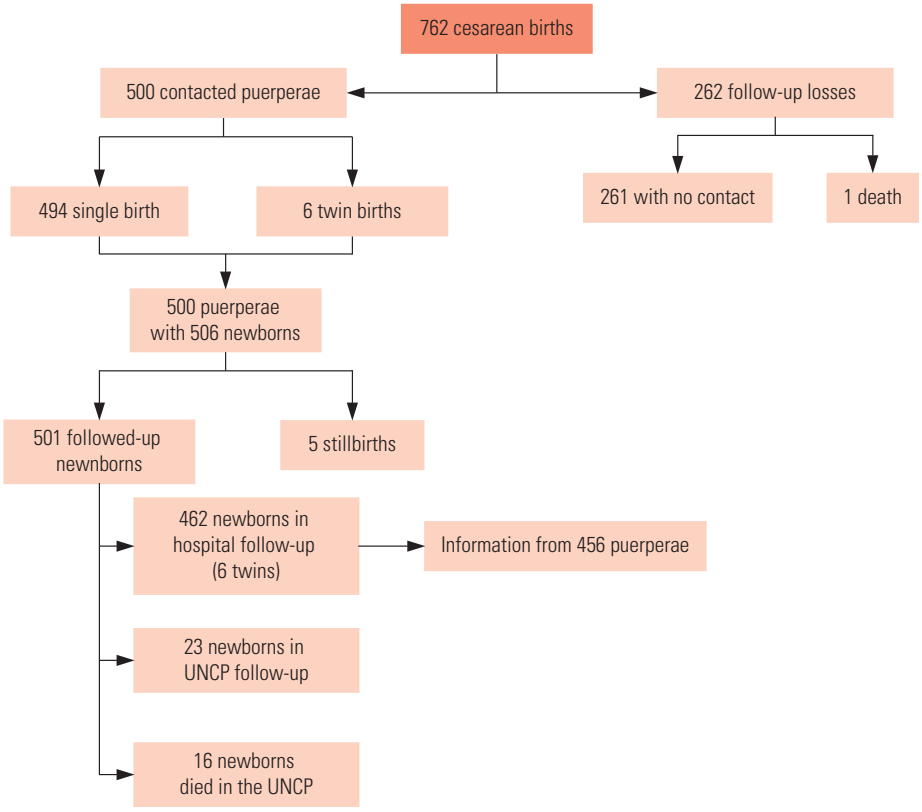

Figure 1 - Flowchart of follow-up of puerperae who underwent caesarean section and their newborns General Hospital /UFMG, 2010-2011.

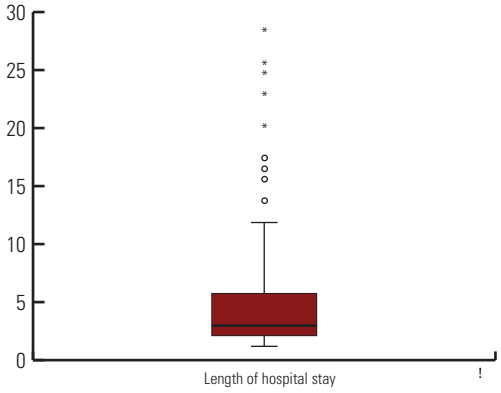

Figure 2 - Hospital stay after childbirth of puerperae who underwent caesarean and their newborns, General Hospital from UFMG, 2010 to 2011.

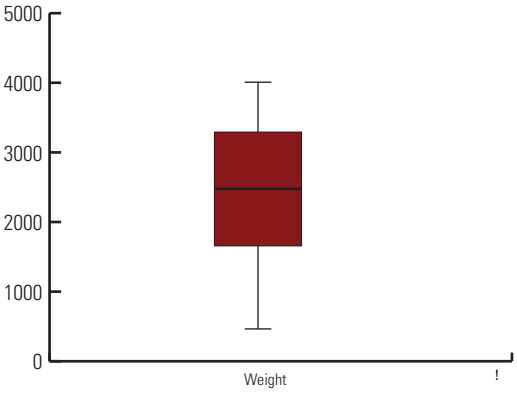

Figure 3 - Weight of newborns of parturient women and puerperae who underwent caesarean, stillbirths, and neonatal deaths, General Hospital from UFMG, 2010 to 2011.

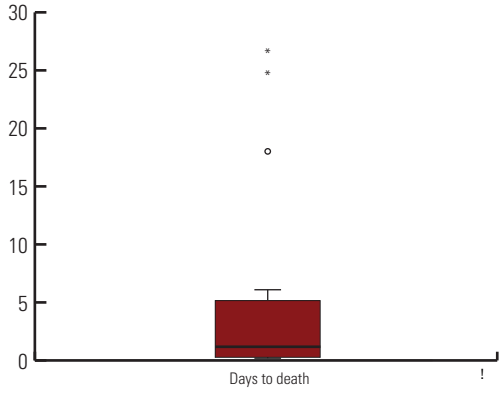

Figure 4 - Evolution time to death in newborns of puerperae who underwent caesarean, General Hospital from UFMG, 2010 to 2011.

Out of the 456 mothers discharged with NBs and contacted within 30 days after discharge, over 90% reported having vaccinated their NBs with anti-hepatitis B and BCG vaccines besides conducting the universal neonatal screening; and one third of them (n=147; 32.2%) reported having performed the hearing screening (Table 1).

Table 1 - Public health actions conducted in newborns from puerperae who underwent caesarean within 30 postpartum days, General Hospital from UFMG, 2010-2011 (n=456)

	Yes		No		I don't know	
	n	%	n	%	n	%
Hepatitis B vaccine	439	96,3	14	3,1	3	0,7
BCG Vaccine	428	93,9	23	5,0	5	1,1
Universal neonatal screening	450	98,7	3	0,7	3	0,7
Hearing screening	147	32,2	306	67,0	4	0,9

The main NBs complications reported by the contacted puerperae after discharge were jaundice in 129 (28.3%) and difficulties in breastfeeding in 45 (9.9%).

Out of the 500 contacted puerperae, 34 (6.8%) were diagnosed with IFC, identified during telephone contacts. The comparative analysis considered the 456 binomials followed-up after discharge, taking into consideration the presence or absence of maternal IFC, according to the NHSN criteria.[10] No statistical difference was observed when considering puerperae assistance in UBSs (p=0.28), NBs assistance in UBSs (p=0.53), and complications diagnosed in NBs (0.81) (Table 2).

When the administration of hepatitis B and BCG vaccines, universal neonatal screening, and hearing screening were considered, no statistical difference was observed between the groups of mothers with and without IFC (p<0.001); some mothers did not remember about these public health actions. When the answer "I don't know" was excluded from the analysis, there was no difference between the groups (Table 2).

DISCUSSION

The HC/UFMG is a tertiary reference service for high-risk pregnant women for Belo Horizonte and other regions in the State of Minas Gerais, which makes the risk of maternal and fetal complications higher with increased likelihood of morbidity and mortality. The profile of the assisted population requires increased need for counter-reference and primary care assurance, which is the focus of this study.

Table 2 - Comparison between puerperae who underwent caesarean section, with and without surgical wound infections(IFC), and puerperae follow-up, NB follow up, and complications in the NB, General Hospital from UFMG, 2010-2011

		With IFC		Without IFC		p
		n	%	n	%	
Puerpera assisted in the UBS	Yes	10	2.2	104	22.8	0.28*
	No	20	4.4	322	70.6	
NB assisted in the UBS	Yes	20	4.4	307	67.3	0.53*
	No	10	2.2	119	26.1	
NB with complications	Yes	13	2.9	194	42.5	0.81*
	No	17	3.7	232	50.9	
NB vaccinated for Hepatitis B[1]	Yes	26	5.7	413	90.6	0.58**
	No	1	0.2	13	2.9	
NB vaccinated for BCG[2]	Yes	26	5.7	402	88.2	1.00**
	No	1	0.2	22	4.8	
Universal neonatal screening[3]	Yes	28	6.1	422	92.5	1.00**
	No	0	0	3	0.7	
Hearing screening[4]	Yes	8	1.8	139	30.5	0.90*
	No	19	4.2	286	62.7	

Answers as "I don't know" were excluded: 3 excluded in [1]; 5 excluded in [2]; 3 excluded in [3]; 4 excluded in [4].
** Exact Fisher's Test.

The neonatal mortality coefficient observed in the studied population (31.9 per 1,000 live births) is considered high because according to the Millennium Development Goals, a childhood mortality rate below 17.9 per 1, 000 live births is expected to be reached.[5,11] Moreover, this study evaluated only the neonatal period in which the mortality rate is higher and corresponding to 60% to 70% of infant mortality in the country.[5] In addition, the service assessed is a reference for high risk patients, including congenital malformations, which leads to increased number of deaths.

The rate observed in this study showed a higher proportion of deaths in the first days. The need to prevent these deaths in the period in which the higher infant mortality occurs, increasing since 1990,[12] is highlighted with a focus on the prenatal diagnosis.

The performance of cesarean section in the cases of extreme prematurity is a protective factor for neonatal mortality,[13,14] however, it increases the risk of death in the event of late preterm birth.[15]

The cesarean rates have increased, particularly in countries with highly medicalized assistance models, noting that Brazil is among the countries with the highest rates recorded, reaching up to 48% of all childbirths.[16] However, the studied population was assisted by the public health system, where fewer unnecessary interventions are performed, including cesarean sections in relation to private assistance as demonstrated in other Brazilian studies.[17,18]

Furthermore, as for the counter-reference to primary care, it was noticed that only 25% of women received medical care in the first 30 postpartum days compared to 71.7% who cited having taken their NBs to consultations. However, they may have been assisted by other professional in the assigned health team. It is considered that women can prioritize their children's assistance, although they should receive all guidelines for their own assistance during postpartum, including the evaluation of their health status and interaction with the NB; verification of complications; and guidance on breastfeeding and family planning. The revaluation of early postpartum is indicated within 10 days and late postpartum within 42 days.[1,2] During telephone contacts, puerperae were encouraged to seek assistance and, when necessary, assistance was facilitated when leaving the hospital, guiding them to the emergency room in case of emergency and surgical wound revaluation or scheduling for family planning, with a structured flow after observation of this demand.

Assistance to NBs showed a median of 11 days. Although the health actions on the fifth day include evaluation of the general terms and conditions of the child, such as jaundice and umbilical stump, the follow-up consultation should be scheduled as soon as possible.[4]

Among the health actions contemplated by the "the actions on the fifth day", there were high rates of adherence (98.7%) to the National Program of Neonatal Screening for the identification of phenylketonuria, congenital hypothyroidism, sickle cell disease/hemoglobinopathies, and cystic fibrosis.[19,20] However, this screening was performed only for NBs who remained hospitalized after the fifth day of life in the HC/UFMG. Vaccination against hepatitis B (96.3%) and BCG (93.9%) showed high adherence, which are the first vaccines included as part of the Integral Assistance to Child's Health.[1,4] It is noticed that vaccination against Hepatitis B may not be informed to mothers because the routine in this reference hospital is to vaccinate to all children up to 12 hours after birth. Conversely, the hearing screening recommended with otoacoustic emissions,[21] which is an action instituted in Minas Gerais since 2007,[22] was the health action with least adherence (32.2%) according to maternal information. In the HC-UFMG, the hearing screening is performed only in NBs at risk who stay

in the Neonatal Intensive Care Unit. During telephone contacts, the difficulty in scheduling an exam in the UBS was identified through the mothers' reports. With this information, the Municipal Health Secretary was contacted and exam scheduling was facilitated.

Regarding clinical complications in NBs, jaundice was the most frequent and described by 28.3% contacted mothers, breastfeeding difficulty was the second problem reported by 9.9% mothers. These complications reflect the importance of the actions on the fifth day, which include evaluation of NB and mother with attention to jaundice and breastfeeding.[1,4] Although the length of stay in the HC/UFMG for the mother-child binomial is 48 postpartum hours for the assessment of the minimum recommended criteria,[23] the importance of reassessing jaundice is emphasized to prevent hyperbilirubinemia encephalopathy,[24] and breastfeeding to prevent early weaning with the identification of technical problems such as breast lesions or oral moniliasis.[2,4,25] When children with complications had not yet been evaluated, mothers were guided to seek assistance and encouraged to breastfeed.

Another important aspect in the follow-up of women who had undergone cesarean delivery is the identification of puerperal infections, especially IFC, which must be monitored up to 30 postpartum days because it is a surgical procedure.[19] When necessary, the identification of cases and hospital assistance was facilitated by the intervention and guidance of the student team responsible for telephone contacts and active searches of post-operative infections.

Mothers were grouped as with and without IFC in the comparative analysis. There was no significant association between IFC and assistance to mother and NB in the UBS in the first 30 days after delivery and with complications in the NB. Therefore, the puerpera care was not associated with IFC since access to care and assistance actions are universal and preventive.

When the health actions recommended to NBs were individually evaluated (vaccination against hepatitis B, BCG, universal neonatal screening, and hearing screening),[3,4] mothers that could not give this information were identified, which leads to questions about the adequacy of the guidance provided or their understanding of the necessary guidance about NB follow-up.

It should be noted that the approach only of patients submitted to cesarean sections could be a bias in this study. However, it is known that the medicalization of assistance has contributed to a high number of procedures, including high rates of cesarean section and, consequently, more maternal morbidity and mortality, including infections[5] that should have compulsory surveillance and notification.[10] Nevertheless, this maternal complication was not observed with the fulfilment of the basic health actions in NBs.

CONCLUSION

The appropriate mother-son follow-up between assistance levels allows identifying assistance demands to health and basic actions that improve reference and counter-reference services and, consequently, maternal and child assistance in the UBS.

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REFERENCES

1. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. Normas e Manuais Técnicos. Saúde Integral da Criança. Brasília; 2004 [Cited 2012 Mar 01]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/agenda_compro_crianca.pdf
2. Brasil. Ministério da Saúde. Pré-Natal e Puerpério Atenção Qualificada e Humanizada. Manual Técnico. Série A. Normas e Manuais Técnicos. Série Direitos Sexuais e Direitos Reprodutivos – Caderno nº. Brasília; 2006. [Cited 2013 Mar 13]. Available from: http://portal.saude.gov.br/portal/arquivos/pdf/manual_puerperio_2006.pdf
3. Belo Horizonte. Secretaria Municipal de Saúde. BH Viva Criança. Compromisso com a Assistência Integral à Saúde Da Criança e Adolescente. Belo Horizonte; 2004. [Cited 2012 Mar 03]. Available from: http://www.pbh.gov.br/smsa/biblioteca/geas/agenda-dacrianca.pdf
4. Minas Gerais. Secretaria de Estado de Saúde. Atenção à Saúde da Criança. Belo Horizonte; 2005. [Cited 2012 Mar 03]. Available from: http://www.saude.mg.gov.br/publicacoes/linha-guia/linhas-guia/Atencao%20a%20Saude%20da%20Crianca.pdf.
5. Victora CG, Aquino EML, Leal MC, Monteiro CA, Barros FC, Szwarcwald CL. Maternal and Child Health In Brazil: Progress And Challenges. Lancet Br. 2011; 377:1863-76.
6. Serruya SJ, Lago TD, Cecatti JG. O panorama da atenção pré-natal no Brasil e o Programa de Humanização do Pré-natal e Nascimento. Rev Bras Saúde Matern Infant. 2004; 4(3):269-79.

7. Sakae TM, Freitas PM, Orsi E. Fatores associados a taxas de cesárea em hospital universitário. Rev Saúde Pública. 2009; 43(3):472-80.
8. Freitas PF, Sakae TM, Jacomino MEMLP. Medical and non-medical factors associated with cesarean section rates in a university hospital in southern Brazil. Cad Saúde Pública. 2008; 24(5):1051-61.
9. Romanelli RMC, Aguiar RLP, Leite HV, Silva DG, Nunes RVP, Brito JI, *et al*. Estudo prospectivo da implantação da vigilância ativa de infecções de feridas cirúrgicas pós-cesáreas em hospital universitário no estado de Minas Gerais, Brasil, 2010 a 2011. Epidemiol Serv Saúde. 2012; 21(3):431-8.
10. Horan TC, Andrus M, Dudeck MA. CDC/NHSN surveillance definition of health care–associated infection and criteria for specific types of infections in the acute care setting. Am J Infect Control. 2008; 36:309- 32.
11. Brasil. Ministério do Planejamento. Objetivos de desenvolvimento do milênio – relatório de acompanhamento. Brasília: IPEA; 2010.
12. Lansky S, França E, Leal MC. Mortalidade perinatal e evitabilidade: revisão da literature. Rev Saúde Pública. 2002; 36(6):759-72.
13. Almeida MF, Novaes HMD, Alencar GP, Rodrigues LC. Mortalidade neonatal no Município de São Paulo: influência do peso ao nascer e de fatores sócio-demográficos e assistenciais. Rev Bras Epidemiol. 2002; (1):93-106.
14. Malloy MH. Impact of cesarean section on neonatal mortality rates among very preterm infants in the United States, 2000–2003. Pediatrics. 2008; 122(2):285-92.
15. Malloy MH. Impact of cesarean section on intermediate and late preterm births: United States, 2000–2003. Birth. 2009; 36(1):26-33.
16. Patah LEM, Malik AM. Modelos de assistência ao parto e taxa de cesárea em diferentes países. Rev Saude Pública. 2011; 45(1):185-94.
17. Cesar JA, Mano PS, Carlotto K, Gonzalez-Chica DA, Mendonza-Sassi RA. Público versus privado: avaliando a assistência à gestação e ao parto no extremo sul do Brasil. Rev Bras Saúde Matern Infant. 2011; 11(3):257-63.
18. Fabri RH, Murta EFC. Socioeconomic factors and cesarean section rates. Int J Gynecol Obst. 2002; 76(1):87-8.
19. Brasil. Ministério da Saúde. Programa Nacional de Triagem Neonatal / PNTN. Portaria GM/MS n.º 822, de 06 de junho de 2001. Brasília: Ministério da Saúde; 2001.
20. Brasil. Ministério da Saúde. Manual de normas técnicas e rotinas operacionais do programa nacional de triagem neonatal. Brasília; 2002. [Cited 2012 Dec 08]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/triagem_neonatal.pdf
21. Bohrer MSA. Sociedade Brasileira de Pediatria. Departamento de Neonatologia. Documento Científico: Triagem auditiva neonatal. Correios da SBP; 2002. [Cited 2013 Mar 14]. Available from: http://www.sbp.com.br/img/correios/sbp_ano8_n3_2002_miolo.pdf
22. Institui o Programa Estadual de Triagem Auditiva Neonatal, define critérios, normas operacionais e procedimentos para a prestação de serviços de Triagem Auditiva Neonatal. Resolução SES Nº 1321, de 18 de Outubro de 2007. Belo Horizonte: Secretaria de Estado de Saúde de Minas Gerais; 2007.
23. Costa HPF. Sociedade Brasileira De Pediatria. Departamento De Neonatologia. Tempo de permanência hospitalar do recém-nascido a termo saudável. [Cited 2012 Dec 15]. Available from: http://www.sbp.com.br/pdfs/doc_tempo-permanencia_rn.pdf.
24. American Academy of Pediatrics. Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation. Pediatrics. 2004; 114(1):297-316.
25. Brasil. Ministério da Saúde. Aleitamento materno, distribuição de leites e formulas infantis em estabelecimentos de saude e legislação. Brasilia; 2012. [Cited 2012 Dez 08]. Available from: http://portal.saude.gov.br/portal/arquivos/pdf/nt_distribuicao_leite_estabelecimento_saude.pdf.