IF : 4.547 | IC Value 80.26

VOLUME-6, ISSUE-8, AUGUST-2017 • ISSN No 2277 - 8160

Original Research Paper

Health Science

QUALITY OF FILL OF THE CHILD'S HEALTH CARD FROM 6 - 24 MONTHS AND ASSOCIATED FACTORS.

Nórgia Elsa, Machava lecturer at the Higher Institute of Health Sciences

Natércia, Fernandes Higher Institute of Health Sciences

ABSTRACT

Objective: To evaluate the quality of information on child health card from 6-24 months of age and the associated factors.

Methods: A cross sectional study was carried out with 280 Children's Health Cards (CHC), and 9 employees working in three health centres (HC) of Maputo City from May to August 2014. The data was collected from the cards and the employees information was collected based on a questionnaire.

Results: The Data on child identification were filled in more than 85%, Apgar score at 87%, for Perinatal history, the head circumference and length of new-borns 30%; for follow-up visits, height 18% weight / height index 14%, the serological status information for HIV, not all items had been filled. The work overloads, lack of training were appointed as the factors that influenced the quality of fills in the card.

Conclusion: It was verified that the health card of the child is not thoroughly filled in, on the spaces for cranial perimeter and length at birth, weight/height index and height for age, and psychomotor development. Although the health professionals revealed that their completion facilitates the monitoring of the state of health of the child, they reported not to fill in the card due to the demand of patients.

KEYWORDS : health card of the child, filling

Introduction

Infant mortality in the world has halved in 25 years, but only 62 countries in 195 have achieved the fourth Millennium Development Goals (MDGs) and Mozambique, even though is low income country has managed to reach this goal, according to the medical magazine The Lancet (2015).

In Mozambique, monitoring the development of the 0-5 year-old child is a central activity in promoting health in the context of health care. Its main objective is the early detection of changes in the development, immunization, of some prevalent diseases in the country such as: Malaria, Malnutrition, HIV/AIDS, Tuberculosis, diarrheal diseases among others (MISAU, 2008).

According to MISAU 2009, the Child Health Card (CHC) is a document identifying and monitoring the health status used by about 3.5 million Mozambicans (0-5 year-old).

In order for the child's health card to be a reliable means of communication, surveillance and promotion of children's health, its proper use is essential, which includes correct and complete record of the information and dialogue with the family on the notes made thereon (Goulart Et al, 2008).

According to REGO (2008), the clinical record is an instrument of fundamental value in perinatal care, as a direct driver of individual care, including the management and care planning issues.

According to MISAU 2011 in the first year of life, the consultations should coincide with the vaccinations, being the first consultation done during the first week of life. In the second year, they must be quarterly, from the third to the fifth semester. From the fifth to the fourteenth year the consultations must be annual and the information relating to the consultations must be recorded on the child's health card.

There has been an interest in assessing the quality of the child's health card filling in as it is a very important instrument for monitoring the health 0-5 year-old children. The age ranging from 0-24 months is the one that must most frequently attend the consultations of healthy or risky child. Because of the experiences during the professional activity in various health units in Maputo, it has been verified that the child's health card was not always filled in, thus making it difficult to monitor the child's development and the control of childhood pathologies.

To what extent health cards are duly filled in by health professionals and what are the factors that influence their completion.

In order to respond to this concern, the study was carried out to evaluate the quality of the child's health card from 6 to 24 months and the associated factors.

Methodology

The study was descriptive, the same was done in the consultations of healthy and risky child, at the Health Centers of Mavalane, Primeiro de Maio and José Macamo in Maputo City, from May to August 2014, from Monday to Friday, from seven to 12 o'clock, which are the hours with the largest flow of patients in the health centres of Maputo City.

Part of respondents of this study were children's parents/caregivers whose children had the new MISAU health card, 2009 edition, aged 6 to 24 months, born and living in Maputo City. And health professionals who had at least 1 year of service in child care appointments.

The population of this study were the health cards of the child and health professionals, with a sample of 280 cards, of which 93 in the Mavalane Health Centre, 73 in the José Macamo Health Center and 114 in the Primeiro de Maio Health Centre and 9 Professionals two Nurses of Maternal and Child Health of each health centre and 1 preventive medicine technician.

To collect data from the quantitative part of the study, the participant observation technique (in the presence of the parents) was used, and the observer's script was used as an instrument. In order to collect the qualitative information, the health professionals who worked in the health centres were interviewed in the consultations of healthy, risky children and Extended Vaccination Program using an interview guide.

The first stage of the study was thus sequenced: 1) the identification of parents / caregivers of children from 6 months to 2 years of age; 2) selection of the same; 3) signing consent forms by the parents / caregivers to be part of the study; 4) observation and collection of health cards data;

The second stage consisted of interviewing the health professionals who attended the children in the consultations with the following sequence: 1) Identification of the health professionals who worked in the health centres that attended the children; 2) signing of

consent forms; 3) completion of the questionnaire.
The protocol was submitted to the National Bioethics Committee for Health with registration number 109 / CNBS / 2013.

Results

In this study, 280 Child Health Cards were verified, ranging from 6 to 24 months of age, with a mean of 13.45 months and a median of 11 months. The most prevalent age group was 6 to 11 months in 52%.

Data on patient identification on the child's health card were mostly completed, but the easiest contact space was not filled in by 40.7%. (Table 1).

In the data on pregnancy and childbirth the least filled in or no information was given: length of the new-born at birth with 27.5%, cranial perimeter 26.6% (Table 1).

In the HIV-related information of the 280 cards observed 23.2% had recorded information about the HIV serological test of the mother. (Table 1)

All HIV-exposed NBs did prophylaxis for the prevention of vertical transmission, 93.8% had PCR testing done, of these 16.4% negative PCR. For all those who had positive PCR the ART regimen was registered on the card. (Table 1)

As regards vaccination and supplementation with Vitamin A, it was 100% filled in, deworming for age completed in 95.7%. In relation to filling the reason for the risk consultation, 18.9% was filled. (Table 1)

In the cards observed, 4.6% of children had at least 1 episode of hospitalization registered on the card with the respective diagnosis and treatment. (Table 2).

With regard to the registration concerning the disease and in the consultation of the sick child, 80 samples had at least one episode of illness and almost all cards with registered diagnosis and the treatment that the child did.

Regarding the consultations of the new-born until the seventh day of life, 50.7% had been records, and 51% had records on the second consultation of the New-born and 41%. (Table 2)

As regards the anthropometric parameters completed during the consultations of the children, the least completed data were height at 17.9%, weight / height index at 5% and cranial perimeter at 5.8% (Table 3).

Table 1. Filling of data in the Child Health Card

Identification	**yes**
N= 280	N (%)
Child's name	229 (81.8)
Child's Gender	280 (100)
Mother's name	268 (95.7)
Father's name	268 (95.7)
Residence	222 (79.3)
Easy Contact	114 (40.7)
Vaccination code	275 (98.2)
Data on childbirth and pregnancy	**Yes**
N= 280	N (%)
Birth Date	278 (99.3)
Birth weight	280 (100)
Place of birth	277 (98.9)
Type of birth	273 (97.5)
Apgar 1 minute	245 (87.5)
Apgar 5 minutes	242 (86.4)
Newborn Length	77 (27.5)
Cranial Perimeter	74 (26.4)
Complication during pregnancy	31 (11.1)
Complication during labour	22 (7.9)
Complication in the neonatal period	13 (4.6)
HIV Information HIV (+)	**Yes**
N=280	N (%)
Mother HIV test (N= 280)	65 (23.2)
Prophylaxis of the New-born (N= 65)	65 (100)
Prophylaxis for opportunistic infections (N= 65)	63 (96.0)
PCR testing (N= 65)	61 (93.7)
Antiretroviral treatment / mother regimen (N= 65)	46 (69.7)
Prevention of mother-to-child transmission (N= 66)	61 (92.4)
Childhood ARV regimen (N= 65)	51 (83.6)
Reason for Consultation of Child at Risk	
N= 280	N (%)
Prematurity	6 (2.1)
Birth weight less than 2.5kg	2 (0.7)
Artificial Milk	5 (1.7)
Father deceased / absent	1 (0.3)
Exposure to HIV	16 (5.7)
Reasons for other care	2 (0.7)
No indication for CCR	68 (24.2)
Nothing filled	179 (63.9)
Historical Food (N=280)	**N (%)**
Feeding according to full age Completely filled	66.9 (23,9)

Table2: Records of hospitalization, Consultation of the sick child and the new-born

Information about possible hospitalizations	**Yes**
(N=280)	N (%)
Number of hospitalizations	12.8 (4,6)
Hospital filled	12.8 (4,6)
Diagnosis	12.8 (4,6)
Treatment	12.8 (4,6)
Inquiry	**Yes**
(N=80)	N (%)
Number of visits (N=80)	72 (90)
Diagnosis (80)	71 (88,8)
Treatment (N= 80)	71 (88,8)
(N=280)	N (%)
Hospital filled	57.1 (20,4)
Newborn (N=280)	**Sim**
	N (%)
First consultation until the 6th day of life	142 (50.7)
Second visit from the 7th to the 20th day of life	143 (51)
Third consultation from 21st to 28 days of life	115 (41)

Table 2. Fills of the Anthropometric Parameters in the consultations

Anthropometric Parameters	**Yes**
N = 280	**N (%)**
Number of visits completed	280 (100)
Age	280 (100)
Weight	278 (99.6)
Height	17.9 (6,4)
Weight / height	14 (5)
Cranial Perimeter	5.8 (2,1)

Health Professionals interviewed reported that they attend on average 30 children per day. When asked if they had any training on how to fill in the health card, all of them answered yes, had training during the academic training and on job training in the workplace.

When professionals were questioned about what may be hindering the completion of all items of the child's health card during the time of the Consultation, they referred to the work overload and the high number of children to be attended per day by providing this information and content:

PS.CS1 (...) When it is very full in the consultation, the staff no longer pay attention to build the graphs of growth (...)

PS.CS2 (...) Excessive Work (...)

PS.CS2 (...) There are many things to note and the children are many (...)

When asked if they thought it important to fill in all the items on the card, all of them responded unanimously saying yes, and referred to the advantages of having all the data filled in as follows:

PS.CS2 (...) In order to control growth (...)

PS.CS2 (...) control of the evolution of the child's growth according to its weight, diseases, etc. (...)

PS.CS1 (...) Facilitates the evaluation of the degree of growth and development of the child, facilitates the collection of recorded data (...)

PS.CS1 (...) For a good accompaniment on the growth of the child from the weight, psychomotor development (...)

PS.CS3 (...) Facilitate the collection of data from the child, facilitates the evaluation of the child's growth and development (...)

PS.CS3 (...) Better control the development of the child, see if the mother fulfils the consultations (...)

When asked about the items of the card that pay the most attention during the consultations the majority reported that the weight, the vaccination the identification and the date of the following consultation according to the following reports:

PS.CS1 (...) Date of the next appointment and where the weight is marked (...)

PS.CS2 (...) Curve of weight, vaccination, identification and serological state (...)

PS.CS3 (...) Date of the next visit, current weight to control whether or not it is growing, and to see if the mother complies with the weight, if the vaccination is complete (...)

PS.CS3 (...) Weight, ages, serological status, vaccination schedule, vitamins and deworming (...)

PS.CS3 (...) All parts are important, ie one complements the other, it is like the human body, all organs are important, the nails complete the body,

PS.CS2 (...) Identification, dates of the consultations to see if the mother complies or not, the weight to see if this is gaining weight or not and vaccination. (...)

Discussion and Conclusions

According to the Ministry of Health (2011) Standards of Attention to Healthy and Risk Child considers that the consultations of the healthy child should be concentrated in the first two years of life, which is a period considered to be of greater risk. In the first year of life the consultations coincide with the vaccination, and the first consultation should be done in the first week of life. In the second year, the consultations should be quarterly.

Despite the fact that greater affluence to the health centre of children under 2 years offers a greater opportunity to have the sample for the study, but the selection criteria adopted in this present study does not allow a representative sample of the population attending the health centres or the City of Maputo, much less of the country of children with health cards in the studied age range.

In this study, the best data are the items related to the identification of the child, filled in more than 85% of the child's health cards. These data corroborate with the study carried out by Alves (2009) in Rio de Janeiro, Brazil, where 365 child health books were analyzed, and Faria (2013) in the municipality of Porto Alegre - Minas Geraie, Brazil, where 150 cards were evaluated. Children's identification data were more than 85% complete. Although the sample sizes and the selection criteria are different, the studies show that the professionals are worried in noting the identification of the child, this can be confirmed by this study where during the interviews with the professionals, they revealed that they were worried about having a Well-identified health card however, in this study the easiest contact is not filled in on all cards.

According to MISAU, the completion of the perinatal history must be done in the maternity ward. In this study, the length of the new-born and the cranial perimeter were the least filled data on observed health cards. No observations or interviews were carried out in maternity hospitals to determine if this data was not filled due to lack of material or if health professionals did not find the same amount.

In this same study, when health professionals were questioned about the importance of filling in all health card data, all of them answered that filling was important, but they did not do it for all items, not for lack of work material, but for not finding them relevant.

Health professionals gave much weight and weight curve over other anthropometric measures because they found it easier through the weight to verify if the child is growing. Paying attention to weight and weight curve, health professionals are complying with WHO recommendations 2006 And MISAU 2008, that recommend the use of reference curves for nutritional status assessment for children under 5 years of age, which in all cards weight and weight curve were adequately filled. However, on the other hand, in relation to weight by height and evaluation of the cranial perimeter, they did not frequently follow the recommendation of MISAU (2011), which says that cranial perimeter measurement should be part of the routine examination of the whole child, especially the first 2 years of life.

In this study, in follow-up visits, height was filled in 18% of the cards and the weight / height index in 14% cards. According to the study done in Brazil by Gaiva & Silva (2014), they report that the data regarding the development of the child are not being adequately filled in the health cards.

In this study, health professionals showed that they were aware of the importance of using the card as an instrument that facilitates the follow-up of the child's development, even though they do not fill all items during the visits. Vaccination surveillance and deworming are one of the main demands on children's health care provided at health centres. These results corroborate with the ones found in the Brsasil in the study by Andrade (2014), where 12 professionals were interviewed and also indicated that the health registry is an important instrument for monitoring the health status of the child.

However, the results of this study cannot be generalized to all health professionals, since all health professionals are not interviewed at all levels of child health care.

The specimen regarding the child's feeding was completed in 23% of cases, the MISAU (2008) Health card of the child guidance for health personnel recommends that this space be filled in with the type of feeding of the child up to 12 months, By placing an "x" in the column corresponding to each introduction and / or maintenance of this feed, when the answer is negative, the corresponding column is left blank. Probably this space was not filled because the parents were feeding in their children in an inadequate way, which is why the health professionals did not fill in this space.

In the health card in use in Mozambique only the upper limits of the child's psychomotor development are indicated, that is, if the child

does not perform such a function, it is considered a problem. In this study this part on the health card was not completed on any card. According to the Lancet 2016, the aspects of psychomotor development should be explored in assessing the health status of the child because about 250 million children under 5 years of age in countries where low income and middle income are at risk of falling short of their potential, Children should be helped to achieve this early childhood potential in physical, cognitive and emotional aspects.

Conclusions

It was verified that the health card of the child is not filled in its entirety, regarding the cranial perimeter and length at birth and the weight/height index and height for age, and psychomotor development. Although the health professionals revealed that their completion facilitates the monitoring of the state of health of the child, they reported not to fill in the card due to the demand of patients.

Implications for Health Policy

Inadequate completion of the Health card and incomplete information may make it difficult to carry out health surveillance and the quality of the records may reveal the malfunction of the services and the performance of their professionals.

Recommendations

A more comprehensive country-wide study should be conducted to ascertain if the results found in this study are similar to the rest of the health facilities in the country.

Carrying out a study to better understand the factors that interfere in the use and fulfilment of the health cards by health professionals working at all levels of health care for the child.

That MISAU intensify the supervision of the activities carried out in children's health, including the quality of the records made on the child's health cards.

REFERENCES

1. ABUD Simone Mourão, GAÍVA,Maria Aparecida Munhoz, (2014), Análise do preenchimento dos dados de imunização da caderneta de saúde da criança, Revista Electrónica de Enfermagem, available in http://dx.doi.org/10.5216/ree.v16i1.24254., acesso 29/09/2014 as 15:04.
2. ALVES C. R. L., atal, (2009), Qualidade do preenchimento da Caderneta de Saúde da Criança e factores associados, Cad. Saúde Pública, Rio de Janeiro, 25(3):583-595.
3. ANDRAD, Gisela Nepomucene de, REZENDE, Tercias Maria Rimeiro de Lima, MADEIRA, Anezia Moreira Faria, (2014), Caderneta de saúde da criança experiências dos profissionais da saúde, Rev. ESC Enferma, Brasil USP available in. www.screlo.br.reusp
4. CARVALHO MF, LIRA PIC DE Ramani SAM, SANTOS IS, VERAS AMCA, FILHO MB., (2008), Acompamnhamento do crescimento em crianças menores de um ano: Situações nos serviços de Saúde em Pernambuco, available in: http://www.scielo.br/pdf/csp/v24n3/21.pdf
5. CNS, resolucão-196-96; Disponível em www.unilestemg.br/comite-de-etica acesso em15/08/2012 as 16:48.
6. CONSELHO MUNICIPAL DA CIDADE DE MAPUTO, (2010), Perfil estatístico do Município de Maputo 2007-2008, 11-15, Maputo, Moçambique.
7. FARIA, Maria,. NOGUEIRA, Talita Almeida, (2013), Avaliação do uso da caderneta de saúde da criança nas Unidades Básicas de saúde em um Município de Minas Gerais, Universidade do Vale do Sapucaí – Pouso Alegre (MG), Brasil.
8. FORTIN, Marie- Fabienne, (2003); O processo de Investigação da concepção a realização; Decarie Editora; Luso ciência.
9. Fundo das Nações Unidas Para a População, (1999), Manual de Metodologia de Investigação Científica, Métodos de amostragem: 50, Maputo, Moçambique;
10. GAIVA Maria Aparecida Munhoz e SILVA Fabiane Blanco, (2014) CADERNETA DE SAÚDE DA CRIANÇA: REVISÃO INTEGRATIVA, Revista de Enfermagem. UFPE available in www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/.../8721
11. GOULART L. M H. F., atall, (2008), Caderneta de Saúde da Criança: avaliação do preenchimentodos dados sobre gravidez, parto e recém-nascido,Rev Paul Pediatr; 26(2):106-12.
12. MARCONI, Maria de Andrade, LAKATOS, Eva Maria; (2007); Fundamentos de Metodologia Ciêntífica; Atllas Editora; 6ª Ed; São Paula-Brasil.
13. MISAU (2009), Reanimação neonatal - um guia para médicos, Enfermeiros.
14. MISAU (2012), Inquérito Demográfico de Saùde 2011, Relatório Preliminar, 05-35, Moçambique.
15. MISAU, (2005), Manual do participante Prevenção de Transmissão Vertical
16. MISAU, (2006), Política Nacional de Saúde Neonatal e Infantil em Moçambique.
17. MISAU, (2008), Cartão de saúde da criança guião de utilização para o pessoal de saúde, Ministério da saúde, Moçambiquee.
18. MISAU, (2009), novo cartão de saúde da criança, Moçambique.
19. MISAU, (2011), Manual de Tratamento da Criança com Infecção pelo HIV/SIDA em Moçambique.
20. MISAU, (2011), Normas de Atendimento à Criança Sadia à Criança em risco, Moçambique.
21. Núcleo de planificação e Estatística do Centro Hospital Geral José Macamo, 2013.
22. PAIVA, Bruno Barbosa Miranda, Etal, (2014), USO DA CADERNETA DE SAÚDE DA CRIANÇA POR ALUNOS DE MEDICINA DA UFMG, site.medicina.ufmg.br/observaped/wp-content/.../sites/.../Poster-CMP.pdf
23. PANOS INSTITUTE SOUTHERN AFRICA (2012). "Prevenção da Transmissão vertical em Moçambique – Experiências e Desefioe da Mulher Grávida seropositiva" disponível em www.panos.org.zm. accessed in 20/11/2014 as 16:00h
24. Pereira M. G. (1995): Epidemiologia Teoria e prática, editora GuanabaraKoogan, Rio de Janeiro.
25. PERFEITURA DA CIDADE DE SÃO PAULO SECRETARIA DE SAÚDE (2006)., Mãe Paulista-Manual Técnico Saúde da Criança 1º ano, Brasil.
26. PITTA, L.D, (2006), Estrutura do TP individual para um projecto de investigação; available in http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S1647-21602012000100008, accessed in 30/07/2012 as 14:20;
27. PREFEITURA- RIO DE JANEIRO, (2010), Linha de Cuidado da Atenção Integral à Saúde da Criança, accessed in 15/10/2013.
28. REGO Maria Albertina Santiago, (2008), Avaliação do Sistema Informativo Perinatal (SPI- CLAP o PS) no monitoramento da assistência Hospitalar perinatal em minas Gerais, Belo Horizonte
29. SILVA A., (2007)atall. registro das vacinas no cartão da criança:um estudo de caso no município de areial-pb;
30. Soares &Naguib, (2001), Cartão de saúde da criança guião de utilização para o pessoal de saúde, Ministério da saúde.
31. UNICF, (2012), Crianças em um mundo Urbano, situação mundial da criança 2012, availabe in scaneie este código QR ou acesse<www.unicef.org/sowc 2012, acesso em 22/07/2013 as 15:20
32. VIANA L.S., ABREU T.G.T., CUNHA C.L.F., (2012) Desafios na utilização da caderneta de saúde da criança: entre o real e o ideal, J ManagPrimHealthCare 2012; 3(2):80-83.
33. VINCELET C, etal, (2012), carnet de santé de l´enfant est-ill informative? Évaluation dans différentes structures de prévention et de soins. Arch pédiatr available in http://www.sciencedirect.com/science/artic le/pii/S0929693X03000861
34. VonHarnack (1980), Manual de pediatria edição Brasileira, São Paulo.
35. WHO, (2006), The WHO Growth Standard, available in www.who.int/childgrowth/en/
36. The Lancet, (2015), Medical Journal
37. The lancet (2016), Series Advancing Early Childhood Development, the early year: Silent emergency or unique oppor-tunity. See online/series