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Structure of children's basic health units: descriptive study

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ABSTRACT

Aim: To evaluate, from the perspective of doctors and nurses, the structure of Basic Health Units that assists children below the age of one year old in the municipality of Cuiabá, Brazil.

Method: This is an evaluative descriptive study, which involved the participation of 26 professionals (12 doctors and 14 nurses) who work in the basic health network. The data was collected via a questionnaire, from October to December 2010.

Results: The evaluation of professionals showed the deficiency of physical structures of the units, especially the lack of places to develop educational activities and also rooms to welcome the users, besides the lack of basic material to assist children.

Conclusion: We can consider that, in general, the service is good, but it is necessary to invest in physical structure, the further education of professionals, resoluteness and counter-reference.

Descriptors: Health Evaluation; Primary Health Care; Quality of Health Service; Children.

INTRODUCTION

Basic Care (BC) is characterized by a set of actions in health, aimed at both the individual and the community. It covers the promotion and protection of health, including the prevention of health issues, diagnosis, treatment, and the rehabilitation and maintenance of health, all of which are delivered with regard to the exercise of managerial and sanitary practices based on teamwork, and addressed to populations in certain limited territories. NOTE CHANGES The use of highly-complex--and-low-density technologies are intended to solve the high frequency health issues that arise in certain territories, and which are the most common reason for users to approach health services. The Brazilian health system is directed by the principles of universality, accessibility and continuity in caring, bond, integrality, responsibility, humanization, equity and social participation[1].

Family Health Strategy (FHS) is the main axis around which to organize BC, and is supported by the principles of the Brazilian Unified Health System (SUS, in Portuguese). FHS replaces the traditional BC network, working in the established territory by performing household registrations; situational diagnosis and undertaking actions related to health issues in an already set organization, established with the community. SUS looks to take care of individuals and families, keeping a proactive attitude towards the problems of health-illness of the surrounding population[1].

To support and organize basic care, and other levels of healthcare assistance directed at children and infants, the Brazilian Ministry of Health (BMH) proposed the Agenda of Commitment for the Integral Health of Children and Reduction of Infant Mortality[2] (or simply Agenda), which defines the main directives of the national policies surrounding children's healthcare. This document also provides general guidelines in infant healthcare that the whole network must offered at a local level, thus aiming to respond to the real health needs of this population.

Agenda presents the guiding principles of child healthcare, including observing planning and development of intersectoral activities, universal access, welcoming, accountability, comprehensive and resolute care. It also aims to ensure equity, teamwork, development of collective action with an emphasis on the promotion of health, participation of families/social control of local health management, and a permanent and systematized evaluation of the health services provided[2].

The current proposed policies regarding infant healthcare focus on reorienting professionals towards a new model of assistance in BC, and the building of a comprehensive and humanized public health service network. However, in order to achieve a considerable improvement in the quality of assistance, it is essential that health units have adequate structures, which includes the physical area, installations, equipment and supplies, all the way through to prepared human resources, such as a good number of professionals who can meet the needs of children and their families.

Therefore, to achieve good results in healthcare, the BMH proposes criteria and minimum standards to elaborate and schedule the renovation, expansion and construction of basic health units, and for the work of the health teams, in order to strengthen BC while ensuring continuity during a period of chance in Brazil's health care service[3].

The availability of adequate structures in health services is a basic requirement for the

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provision of health care assistance[4]. Consequently, it is necessary to further investigate and discuss both the conditions of organization and the structure of basic health units for children below the age of one year old. Based on these considerations, we believe that the quality of healthcare services provided to children today is still a challenge to professionals, policymakers and the community. This is in spite of the changes and developments in the health of the general and infant populations, brought about since the creation of SUS and the implementation of SHF. Hence, this present study aimed to evaluate, from the perspective of doctors and nurses, the structure of Basic Health Units (BHU) that assist children below the age of one, in the municipality of Cuiabá.

METHOD

This is an evaluative descriptive study, performed in the municipality of Cuiabá, which in the year of 2009 had 550,562 inhabitants. Of this figure 8,340 were children under the age of one, corresponding to 1.5% of the total population[5]. Today, the basic health network of the city consists of 85 basic units: 22 Health Centers (traditional BHU) and 63 Family Health Units (FHU), of which 60 are located in the urban areas and three in the rural areas; ten dental clinics and one mobile unit which serves the 22 rural communities. Nowadays, FHU covers 48% of the city's population[6].

This research was performed in traditional BHU and FHU that provided services to children below the age of one and that had at least two children registered at the moment of sample selection. Thus, 15 BHU were investigated, consisting of 14 FHU and one traditional BHU.

In this study, 26 professionals participated (14 nurses and 12 doctors) and at least one professional was selected from each health unit based on the certain criteria. This included the fact that that they provided assistance and service to children below the age of one and that they were either a doctor or nurse. It did however exclude those who were away from work due to vacation, or any other type of absence, and those for whom permission was denied. These professionals were selected because they are responsible for following the growth and development (GD) of children; therefore it is they who have the most contact with the children and relatives in these units.

The data was collected through a structured questionnaire, which was distributed to the professionals, between October and December 2010. This instrument included person questions concerning the professional, covering topics such as their undergraduate and post-graduation courses, type of employment and work shifts, as well as data about structure, process and outcome of the assistance provided to children below the age of one, as described in Donabedian's model[4]. We followed the standards published in the Manual of Physical Structure of Basic Health Units: Family Health[3] and the National Policies in Basic Care[7] (PNAB, in Portuguese), and the main directives to assist children as seen in the Agenda[2].

In this study we elected to use Donabedian's model[4] of healthcare evaluation because, in our opinion, it is the most adaptable to our reality and it covers the areas we want to evaluate, namely, structure, process and outcome. In this article, we considered the following dimensions of the structure: physical area, installations, human resources and supplies to provide healthcare.

The data was stored in an electronic worksheet and analyzed through the software Statistical Package for the Social Sciences (SPSS) and the treatment of data was carried out through descriptive statistics. To proceed to the evaluation and dimension of structure, the acquired data was compared to the propositions of the Manual of Physical Structure of Basic Health Units: Family Health[3], Agenda[2] and PNAB[7], in order to permit an analysis of structural quality available to assist children. This was based on the studied environment, seeking to find evidence of either the presence of favorable or unfavorable conditions for assisting children in the basic health network.

After the Municipal Secretary of Health of Cuiabá authorized this research, the project was analyzed and approved by the Committee of Ethics in Research at the College Hospital Júlio Muller, under protocol 882/CEP-HUJM/2010. The participating professionals signed the Free and Clear Consent Agreement after they were informed about the objectives of this study and the collection of data, and after they were assured of their anonymity.

RESULTS

The quality of healthcare service is influenced by many factors, one of which is structure. Good structural conditions generate higher chances to contribute to an adequate process of healthcare, achieving favorable results.

Characterization of the professionals

Table 1 shows the socio-demographic characteristics of the studied professionals. From the 26 health professionals, seven (26.9%) were males and 19 (73.1%) were females. The age varied from 24 to 69 years old, with an average age of 38.8 years old. Regarding their type of employment, 13 (50%) of the professionals were permanent staff, 12 (46.2%) were temporarily hired and one (3.8%) had another type of employment, which was not described. With regards to their work shift, 24 (92.3%) worked fulltime (40 hours a week).

From the studied professionals, 12 (46.2%) have some post-graduation title (latu sensu, or specialization) in the area of public health or family health, 12 (46.2%) have a specialization in other related areas, and two (7.7%) do not have any specialization degree. As Table 1 also indicates, it is important to note that no professional has any specialization in infant health.

Table 1 – Profile of professionals working in children's healthcare in the Basic Health Network. Cuiabá, Brazil, 2010 (n=26)

Variable	N	%
Background		
Doctor	12	46.2
Nurse	14	53.8
Latu Sensu Post-Graduation		
Public Health/Family Health Strategy	12	46.2
Others	12	46.2
None	2	7.7
Type of Employment		
Permanent Staff	13	50.0
Temporarily Hired	12	46.2
Other	1	3.8
Work Shift		
Full-time (40 hours)	24	92.3
30 hours	1	3.8
Other	1	3.8
Total	26	100.0

Source: generated by the authors

Physical Space

For 16 (61.5%) of the interviewed professionals, their units do not have either a

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room to receive patients or a meeting room (12/46.2%). It was also observed that, with regards to physical structure, all units have medical and nursing offices, a vaccination room, a place to dispense drugs, and restrooms for the users. As Table 2 shows, the majority have a reception room (96.2%), dressing room (92.3%), exclusive restrooms for personnel (88.5%) and proceeding room (73.1%).

Table 2 – Distribution of available physical structure in health units, according to the opinion of professionals. Cuiabá, Brazil, 2010 (n=26)

Variable	Yes		No	
	N	%	N	%
Room to receive patients	10	38.5	16	61.5
Reception or Waiting room	25	96.2	1	3.8
Meeting Room	14	53.8	12	46.2
Nursing Office	26	100.0	-	-
Medical Office	26	100.0	-	-
Proceeding Room	19	73.1	7	26.9
Dressing Room	24	92.3	2	7.7
Drug Storage and Dismiss Room	26	100.0	-	-
Exclusive Vaccination Room	26	100.0	-	-
Exclusive Restroom for Personnel	23	88.5	3	11.5
Restroom for the Users	26	100.0	-	-

Source: generated by the authors

Material resources and equipment

Based on the availability of basic equipment to provide healthcare assistance in a health unit, we highlight that no unit had children's ambulatory equipment. As Table 3 shows, 25 (96.2%) professionals reported that their units did not have oxygen cylinders, 21 (80.8%) said they did not have a laryngoscope and 17 (65.4%) reported they did not have lamps.

With regards to the presence of specific material to assist children, only a scale and measuring table was made available in all units. Equally, as presented on Table 3 shows, 11 (42.3%) units did not have a sphygmomanometer for children; eight (30.8%) did not have an otoscope; seven (26.9%) did not have a stethoscope for children; two (7.7%) did not have a thermometer and one (3.8%) did not have an anthropometric ruler.

Table 3 – Distribution of equipment and basic material available in units, according to the opinion of professionals. Cuiabá, Brazil, 2010 (n=26)

Variable	Yes		No	
	n	%	n	%
Children's Ambulatory	-	-	26	100.0
Oxygen points/ Oxygen cylinders	1	3.8	25	96.2
Laryngoscope	5	19.2	21	80.8
Lamp	9	34.6	17	65.4
Scale for children	26	100.0	-	-
Measuring tape	26	100.0	-	-
Sphygmomanometer for children	15	57.7	11	42.3
Otoscope	18	69.2	8	30.8
Stethoscope for children	19	73.1	7	26.9
Thermometer	24	92.3	2	7.7
Anthropometric ruler	25	96.2	1	3.8
Refrigerator to store medication	21	80.8	5	19.2
Tweezers and scissors	20	76.9	6	23.1
Negatoscope	18	69.2	8	30.8
Thermometer for vaccine fridge	26	100.0	-	-
Ophthalmoscope	9	34.6	17	65.4
Exclusive fridge for vaccine	25	96.2	1	3.8
Aerosol instrument or nebulizer	25	96.2	1	3.8

Source: generated by the authors

According to the professionals, all units have the basic supplies needed to provide a good level of healthcare services. However,

only 12 (46.2%) professionals reported that their units were equipped with sterile gloves and other products for the chemical sterilization of instruments. Moreover, only one unit did not have a sharp waste collector.

According to the information provided by the professionals, the majority of the antibiotic drugs in the units are standardized by the BMH. Nystatin and ferrous sulfate were present in all units. On the other hand, dipyrone, paracetamol and oral rehydration serum were found in 25 (96.2%) units. Medications, such as potassium permanganate and glucose/physiologic serum were present in 23 (88.5%) and 21 (80.8%) units, respectively.

With regards to the basic calendar of children's vaccines, 25 (96.2%) professionals reported that their units offer all of them. Based on the vaccines in general, 21 (80.8%) professionals reported that the units have the rabies vaccine and 17 (65.4%) the H1N1 Influenza shot. Chickenpox vaccination was available in only six (23.1%) units.

In terms of support forms related to assistance to the child, all professionals report that in their units they found report cards related to the Information System of Grievance Notification (SINAN, in Portuguese), a form to be used as a reference and counter-reference, and report cards related to the System of Food and Nutrition Surveillance (SISVAN, in Portuguese).

At the same time, the records of the Information System of Basic Care (SIAB, in Portuguese) were not available in one (3.8%) of the units; the records of the Brazilian National Program of Iron Supplementation were missing in two (7.7%) units and the booklet of child vaccination was not present in five (19.2%) units. Only 17 (65.4%) professionals reported that their units had the charts to log development, placed with the child's medical records. According to the report of 17 (65.4%) interviewees, their units did not have the Evaluation Record of Integrated Care of the Prevalent Diseases in Childhood (AIDPI, in Portuguese).

Regarding the use of clinical protocols to assist children, 23 professionals (88.5%) said that they used them, while three (11.5%) performed the consultations without following any protocol.

With regards to the availability of support supplies and equipment, in relation to the performance of general activities in the unit, all had telephone landlines and the majority had water fountains on site (24/92.3%). However, the health units of only 14 (53.8%) professionals had working computers and no unit had access to the Internet. Printers were present in 17 (65.4%) units; 22 (84.6%) units had television sets and 11 (42.3%) had DVD players.

This study did not evaluate the quantity of human resources available in the units, as it aimed to analyze only the service provided to children. We call attention to the fact that the city's FHUs are composed of a minimum team of professionals, according to the definition of the BMH[7].

All teams in the municipality have a doctor and a nurse, two to three nursing technicians or assistants and an average of 12 Community Health Agents (CHA), depending on the area covered by the team. Besides that, some units have a typist and all have a receptionist and a security guard.

Meanwhile, traditional BHU do not have a set minimum team of professionals, and many of them have two nurses, more than one doctor in each main specialty, at least three nursing technicians or assistants, one dentist and one dental assistant. CHA is only present in the units that participate in the Program of Community Health Agents. It is important to

highlight that the majority of these units has one service manager.

DISCUSSION

The participants in this study composed of experienced professionals, with an average of 38.8 years old, who specialized in the area of family health/public health, and who demonstrated enough understanding to work in BC. There was a predominance of female professionals, which reflects the reality of the health work force in the municipality, as was indicated by a study performed in 10 of the largest urban centers in the Brazilian state of Mato Grosso[8].

In the area of health, in many countries, the occupation of the female workforce has reached 75%, which makes women indispensible to health service. This contingency largely composes the nursing personnel[9].

To achieve an assisting practice, with an expected quality in the services provided, it is essential that these services based on adequate structure, which involves a number of factors. This includes: the physical areas and installations, supplies, equipment, an adequate number of professionals with specific qualification, and that they interact with the client and relatives, in order to build a link based on affection and respect for the autonomy of the users[10].

Using the information provided by the doctors and nurses, it was possible to verify that, of the 20 rooms and other spaces considered indispensable by the BMH[3] for the proper functioning of a BHU, only 5 were available in all units, thus demonstrating the precarious conditions in the structure. For the participants, the health units lack some aspects in structure, as absence of physical space to welcome users and the reception, a meeting room to be used both by the health team and by the activities in health education, and restroom for the staff.

The basic characteristics of the structure are relatively stable and work to promote care and it is an attribute of the BHU environment. This means that the structural characteristics of the places where healthcare is offered has a tendency to influence the process of caring, reducing or increasing in quality[4].

A study analyzed the perceptions of health professionals, policymakers and users about the Family Health Program in two municipalities in the Brazilian state of Minas Gerais. It pointed out that doctors identify the lack of adequate infrastructure as a negative aspect of the new proposals for restructuring BC[11].

The waiting room, which is a space designated for the users of health services and their escorts, must be planned in a format to create a comfortable and pleasant environment, with an adequate luminosity, temperature, noise and proper seating to assist in the interaction of the individuals. Its dimensions must allow it to hold approximately 15 people per BHU, without considering the criteria of humanization and proper internal flux[3].

The reception room of the units must be a space designated for information, records, scheduling and referrals, and offering a dignifying welcome to the user. It needs to have a counter, a lack of grids or glasses separating the staff member and the user, chairs, shelves, bulletin boards, computers and telephone[3].

Even though the majority of the studied units had a reception room, it was usually in a poor condition, without proper ventilation, inadequate seating, unable to meet the needs of the number of users. Moreover many BHU are pre-built or in adapted buildings and also lack supporting resources, such as computers.

According to the information from the interviewees, almost half of the units have a meeting room, which is a space designated for educational group activities where the objective is to deal with topics related to general population health. The units must have a space with a blackboard, bulletin board, enough chairs to host all participants, a desk, a television set, VCR, computer, an overhead projector, a projection screen and other similar media equipment. In the case of compact BHU, the main waiting room must be equipped to perform the functions of a meeting room, and to be used after hours[3].

Similar data was found in a study that evaluated the structure of traditional BHU in the municipality of Cuiabá, which found that only 28% of the studied units had meeting rooms[12].

Another study, that researched the performance of BC in 41 cities in the South and Northeast regions of Brazil, identified the existence of reception room in almost all BHU (98%), despite the fact that only 13% of respondents considered this room to have appropriate lightning, noise and ventilation. This mentioned study, comparing the regions of Brazil, was carried out through the characterization of process and outcome, based on the perspective of presidents of Municipal Health Council, Municipal Health Secretaries and Basic Care Coordinators, as well as health professionals, users and residents of the coverage areas of the BHU services[13].

The purpose of a meeting room, or a waiting room, that permits educational activities, is that these spaces are part of a strategy to strength SUS and to provide an equal, universal and egalitarian access for patients that use the health service. They can also be considered as a mode of caring, capable of assisting and teaching individuals how to recognize their own health needs, identifying the problems in their communities, stimulating the creation of critical and participative attitudes in the families that generate well-being in the community[14].

The ambience of a basic health unit reflects the physical space (architecture), which must reflect a welcoming and humanized care, both to health professionals and to the users of the health service. It relates to the aesthetic components of the unit and by the on the impact on the senses[3] as perceived by the users.

The data found in this research are compatible to a study performed in 37 cities in the center-west region of the state of São Paulo, which evaluated the quality of BC and showed that the installation of the units, in many cases, are not appropriate. The physical space is not appropriate to the demand; the basic conditions of infrastructure are mostly precarious, the ventilation is inappropriate and the units do not have access to the Internet[15].

Another study evaluated the structure and the outcome of 31 health units that belong to the Municipal Secretary of Health and Well-being of Pelotas and identified the hazardous conditions in structure and services, especially regarding the physical plant, achieving only 38% of the standard established by the evaluation instrument used[16].

In this study, according to the professionals, all analyzed units had nursing offices. However in the study performed in a traditional BHU in the city of Cuiabá, it was found that only 44% of the units had such a specific facility. To compare these cities, it is important to observe that these municipalities use distinct assisting models with different work methods, thus making a further analysis of these differences necessary[12].

The evaluation of professionals also showed that some equipment and basic supplies

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assisting children were not available in all units. It is important to mention that many of the supplies used in the units, such as otoscopes, lamps, ophthalmoscopes, sphygmomanometers and laryngoscopes, belonged to the professionals themselves.

Considering the audiovisual equipment and computers, it similar results were found to the study performed in traditional BHU in Cuiabá, where only 67% of the studied units had television sets, 28% had computers and 17% had printers, and none had access to the Internet[12].

A study that evaluated the structure designated to children's nursing consultation in SFH in the municipality of São Paulo, showed different results with regards to the material resources to those found in this study. This was because the great majority of the evaluated units had supplies to assist children based on BMH recommendations[10], a situation which was not found in the present study. The Brazilian National Policy in Basic Care states that that adequate equipment and supplies, proportionate the suggested actions, must be available at all times, in order to guarantee the resoluteness of BC[7].

Another piece of research performed a situational diagnosis of the actions of growth follow up in children under one year old in 18 municipalities of the Metropolitan Region of Recife and other areas in the Brazilian state of Pernambuco. It observed the health units of the public sector, including clinics, centers, maternity units, mixed units, regional hospitals, besides the units of Family Health Program and Health at Home Program, which assisted children below five years old. It showed that 84.2% of the researched units had operating baby scales and, in 15.8% of the locations, this equipment did not work or did not exist[17].

Taken as a set, the structural indicators show similar results to those found in other evaluation studies involving FSU, particularly the lack of physical space, which was also observed in the present research. Specifically, besides offering the minimal conditions needed to provide basic health actions, such as immunization –following technical criteria established by the BMH – the units' lack of supplies can impact upon the level of care provided, as was seen in the areas of growth follow-up and child development.

The conditions with regard to infrastructure can also influence the reorientation of the assisting model, as one of the proposed strategies is to ensure the existence of a space to welcome users, clearly absent in the majority of the units observed in this study.

CONCLUSION

This research was based on a questionnaire distributed to doctors and nurses who assisted children under the age of one in BHU and FHU in Cuiabá. A limitation of this study was the exclusive use of the questionnaire to evaluate the structure of the services, which besides permitting a fast and economic evaluation, could be better used if merged with other strategies, such as the direct observation of the units.

The available structure to assist children, in particular the physical installations of basic care units, did not correspond to the minimal standards adopted by the BMH, with a noted deficiency in certain necessary spaces. In the evaluation of the structure of the studied units, many aspects need investment. Among them is a need for a physical space for educational activities and for welcoming users, both of which are fundamental to a good

healthcare service for children and relatives. In this area, some adequacy was done to the physical space according to the standards of the BMH.

There is a marked lack of the supplies and equipment needed to assist children. This can impede the work of health professionals in their efforts to ensure high quality in infantile health, and there is also a need to introduce educational practices and to introduce measures to counter grievances.

This study contributes to a deeper view of the structures of basic units that assist children below the age of one in Cuiabá, showing that besides the general development of health provisions in the municipality, a great deal of investment is needed to guarantee children's rights to an integral and quality health service.

In this sense, the nurse is fundamental to the implementation of all the development in the routine of children care, observing the principles of SUS and the policies towards the assistance of this clientele.

REFERENCES

1. Ministério da Saúde. Departamento de atenção básica. Política nacional de atenção básica. Secretaria de atenção à saúde. 4. ed. Brasília (DF): Ministério da Saúde; 2007.
2. Ministério da Saúde. Secretaria de atenção à saúde. Departamento de ações programáticas estratégicas. Agenda de compromisso para a saúde integral da criança e redução de mortalidade infantil. Brasília (DF): Ministério da Saúde; 2005.
3. Ministério da Saúde. Departamento de Atenção Básica. Manual de estrutura física das unidades básicas de saúde: saúde da família. Secretaria de Atenção à Saúde. 2. ed.. Brasília (DF): Ministério da Saúde; 2008.
4. Donabedian A. La calidad de La atención médica: Definición y métodos de evaluación. [S.l.]: Prensa Médica Mexicana; 1991.
5. Secretaria Municipal de Saúde de Cuiabá [homepage on internet]. Relatório de Gestão 2009 [cited 2011 Abril 21]. Available from: <http://www.saude.cuiaba.mt.gov.br/site/conteudo.php?id=332>.
6. Secretaria Municipal de Saúde de Cuiabá [homepage on internet]. Relatório de Gestão 2008 [cited 2011 Abril 21]. Available from: <http://www.saude.cuiaba.mt.gov.br/site/conteudo.php?id=331>.
7. Ministério da Saúde (Brasil). Portaria no. 648 de 28 de março de 2006. Política nacional de atenção básica, estabelecendo a revisão de diretrizes e normas para a organização da atenção básica para o programa saúde da família (PSF) e o programa agentes comunitários de saúde (PACS). Diário Oficial da União 29 mar 2006; Seção 1.
8. Canesqui AM, Spinelli MAS. Saúde da Família no Estado de Mato Grosso, Brasil: perfis e julgamentos dos médicos e enfermeiros. Cad Saúde Pública. 2006 set; 22(9): 1881-92.
9. Organização Mundial de Saúde [homepage on internet]. Departamento de Recursos Humanos para a Saúde. Spotlight: estatísticas sobre a força de trabalho em saúde [Cited 2011 Apr 19]. Available from: http://www.who.int/hrh/statistics/Spotlight_2_PO.pdf
10. Saparolli ECL, Adami NP. Avaliação da estrutura destinada à consulta de enfermagem à criança na atenção básica. Rev esc enferm USP. 2010 mar. 44(1): 92-8.
11. Ronzani TM, Silva CM. O Programa Saúde da Família segundo profissionais de saúde, gestores e usuários. Ciênc saúde coletiva. 2008 fev; 13(1): 23-34.
12. Pedrosa ICF. A infraestrutura de unidades básicas de saúde do município de Cuiabá-MT e sua relação com as práticas do enfermeiro [dissertação]. Cuiabá: Faculdade de Enfermagem da Universidade Federal de Mato Grosso; 2011.
13. Facchini LA, Piccini RX, Tomasi E, Thumé E, Silveira DS, Siqueira FV, et al. Desempenho do PSF no Sul e no Nordeste do Brasil: avaliação

institucional e epidemiológica da Atenção Básica à Saúde. Ciênc saúde coletiva. 2006 set; 11(3): 660-81.

14. Pedro E, Cabral F, Colomé J, Cocco M, Soder R, Crossetti M. Ethics of care in public health educative actions - a literature review Online Brazilian Journal of Nursing [Internet]. 2006 Apr [Cited 2012 Sep 22]; 5(1). Available from: http://www.objnursing.uff.br/index.php/nursing/article/view/112.
15. Castanheira ERL. Avaliação da Qualidade da Atenção Básica em 37 Municípios do Centro--Oeste Paulista: características da organização da assistência. Saúde soc. 2009; 18 Suppl 2: 84-9.
16. Silveira DS, Santos IS, Costa JSD. Atenção pré-natal na rede básica: uma avaliação da estrutura e do processo. Cad saúde pública. 2001 fev; 17(1): 131-39.
17. Carvalho MF, Lira PIC, Romani SAM, Santos IS, Veras AACA, Batista Filho M. Acompanhamento do crescimento em crianças menores de um ano: situação nos serviços de saúde em Pernambuco, Brasil. Cad saúde pública. 2008 mar; 24(3): 675-85.

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