



## Cultural knowledge and treatment of childhood illness

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**Abstract:** Traditional knowledge emerges as a relevant figure in care used by mothers and caregivers for the management of acute respiratory infections, diarrhea and anemia. To understand the meaning given to the use of traditional knowledge by mothers or caregivers for the treatment of these illnesses, their reflexes to conventional treatment, as well as discuss the role of health professionals with regard to the use of plants and animals by mothers or responsible for the management of the respiratory infections; diarrhea and anemia. The research was conducted in Santo Antônio community (Barbalha - CE). Techniques as “rapport” and “Snowball” were used for data collection, and a closed questionnaire and semi-structured interview were applied. For data analysis, the Collective Subject Discourse (CSD) was used. The sample included 54 informants. There were 19 key ideas identified, which revealed an appreciation of the use of natural resources to treat the respiratory infections; diarrhea and anemia, an association between conventional and traditional medicine in the management these common childhood illnesses and the need for health professionals value the popular knowledge in assistance provided. Health professionals are encouraged to include behaviors in their care practice that allow greater contact with local cultures, being able to measure what resources are used and how they can interfere on the prescribed therapy.

**Key words:** Children’s Health; Health Personnel; People Knowledge.

### Introduction

Traditional Medicine can be appropriately defined as a medical system based on beliefs of certain people and as an important cultural element with its knowledge scope built and settled in daily life, making totally part of what is defined and known as popular wisdom.<sup>1,2</sup>

Therefore, it is noteworthy that the health-disease binomial and the way to understand it is related to historical organization of communities, covering their cultural characteristics and their knowledge.<sup>3</sup> Some research still show that traditional knowledge is focused more intensely among females, conditioning a knowledge cycle perpetuated in later generations, although not in a full way. Therefore, this body of knowledge is undeniably reflected in care given by these women to their families, especially their children.<sup>4,5</sup>

Corroborating with Mello<sup>6</sup>, it is known that to provide good health conditions during childhood, integrated actions are needed, involving “monitoring of growth and child development, encourage breastfeeding, child feeding guidance, immunization and care to childhood illness” (p. 749).<sup>7,8</sup>

In this sense, among the priority health problems to the population 0-5 years old in Brazil, there are acute respiratory infections, diarrhea and anemia, culminated by nutritional deficiencies,

characterized as controlled and able to be treated in the primary health care.<sup>9</sup>

Given the relevance of childhood illnesses in the context of public health, especially in developing countries, it becomes necessary to understand the nuances related to the care process instituted by mothers/caregivers for the treatment and management of acute respiratory infections (ARI), diarrhea and anemia.

In this way, the objectives of this study were to understand the meaning attributed to the use of natural resources by mothers or caregivers to treat these prevalent illnesses in childhood and to understand the influence of cultural factors in the treatment of health problems as well as to discuss the health professionals acting regarding the use of plants and animals by mothers/caregivers for the management of ARI; Diarrhea and Nutritional Deficiencies (anemia).

### Materials and Methods

As a methodological strategy on qualitative research, this study adopted the construction of the Collective Subject Discourse - CSD. Thus, it is emphasized that the CSD is the combination of individual speeches, generated by an open question, aimed to effectively express the thought of a community.<sup>10,11</sup>

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The research was conducted in Santo Antônio community (Sítio Santo Antônio), located in Arajara District, in the city of Barbalha (CE). The reason why this community was chosen for data collection is due to be a traditional community, in accordance with the requirements given by the Ministry of Environment.<sup>12</sup>

All stages of the research were carried out during the months of May 2013 to January 2015. The study population consisted of residents of Santo Antônio community (Barbalha - CE), aged between 12 and 90 years old. Adolescents were included in the research due to the pregnancy rate in adolescents in the city and surrounding regions, and because many of them help in younger siblings, nephews and cousins care.<sup>13</sup>

As inclusion criteria, there was the need to outline knowledge regarding the use and management of medicinal plants and/or animals to treat childhood illnesses.

On the other hand, people with allopsychic and autopsychic disorientation and users under the influence of sedatives causing changes in greater or lesser level in their motor and mental functions could not participate in the research.

There were visits to Santo Antônio community, where the researcher was introduced to the community leader. The major purpose of this initial contact was the indispensable confidence in obtaining information, technique known as "rapport".<sup>14</sup>

Then, the first subjects who met the criteria for research were contacted. Thus, a closed questionnaire for socioeconomic characterization of the research subjects was first applied.<sup>15</sup>

Later, a semi-structured interview guide was used. The interview applied to this research included three questions. It is noteworthy that a pilot test was conducted in a Basic Health Unit, located in the rural area of the city of Crato.

To compose the total sample, the technique called "SnowBall"<sup>14</sup> was used and to finalize the composition of the sample the criteria of answers saturation<sup>16</sup> was applied. The data collected were transcribed and Qualiquantisoft software was used for their analysis.

During the development of the research, all requirements of the Guidelines and Standards of Research Involving Human Beings were met, regulated by Resolution 466/12 of the National Health Council. The study was submitted to the Platform Brazil, with a favorable opinion number 705.497.

## Results

### Sample characterization

The research included 54 informants, randomly divided into seven different groups, according to the order of the interviews. Table 1 (below) expressed the profile of informants who participated in the survey.

**Table 1:** Profile of informants of Sto. Antônio (Barbalha) – CE.

City	Place	N	%
Barbalha – CE	Sto. Antônio	54	100
<b>Gender</b>			
		24	44.44
		30	55.56
<b>Age Group</b>			
		9	16.67
		11	20.37
		15	27.78
		11	20.37
		3	5.56
		5	9.25
<b>Time of residence in the area</b>			
		--	--
		3	5.56
		8	14.81
		12	22.22
		8	14.81
		11	20.37
		9	16.67
		3	5.56
<b>Education</b>			
		--	--
		15	27.78
		3	5.56
		12	22.22
		23	42.59
		1	1.85
<b>Occupation</b>			
		1	1.85
		28	51.85
		9	16.67
		3	5.56
		1	1.85
		6	11.11
		1	1.85
		1	1.85
		1	1.85
		3	5.56

**Source:** Research conducted in sto. Antônio community – Barbalha, 2014.

Collective subject discourse: understanding subjective questions through a quantitative and qualitative analysis

For this research, three elements were used to guide the methodological procedure of this type of data analysis: the Central Idea (IC), the Expressions Key (EC) and CSD.

### Central ideas and CSD - 1<sup>st</sup> question

For the 1<sup>st</sup> question, the central ideas are shown in Table 2 (below), along with the proportion of the responses obtained according to gender. It is noteworthy that the speech of a subject can have more than one IC.

**Table 2:** Central ideas of question 1 and proportion of the responses according to gender.

**1<sup>st</sup> Question** – How would you rate the outcome of treatment for these diseases with the use of plants and/or animals?

Central Ideas	Female Gender		Male Gender	
	n	%	N	%
A It is good, it is affordable in practice and economic way	4	7.40	2	3.70
B It is good, plants do harm when we do not know how to use them	6	11.11	1	1.85
C It is good, homemade medicine is better than the pharmacy medicine	6	11.11	4	7.40
D It is good, because it works	15	27.77	7	12.96
E It is good, but because we have faith	2	3.70	0	
F It is good, but many people do not seek this type of treatment anymore	1	1.85	2	3.70
G It is good, but only for some diseases	2	3.70	4	7.40
H It is good, but today it is easier to buy the medicine ready at the pharmacy	1	1.85	2	3.70
I It is not good, because it is outdated	0		1	1.85
J It is excellent, because if the child does not get better, he will not be worse	1	1.85	0	
<b>Total of responses*: 54</b>				

\*The speech of the subjects showed more than one central idea.

In Box 1 there are the CSD of the most recurrent IC, A, C and B. It is noteworthy that the oral expressions respondents in selected EC have been preserved and transcribed in full without grammatical adjustment.

**Box 1:** CSD of most recurrent IC of question 1

**CSD D:** It is good, because it works (IC)

I think it is good because we see that it works and it works very well. It always works until today. It is something that I find very useful, because it heals. If I tell you it is good is because we see that it solves everything. If it did not result, ok, but it works, yes! My son did not go to the doctor, he treated them only with the plant. Who uses knows, how it works. It is useful to us, we use it because we can see it works.

**CSD C:** It is good, homemade medicine is better than the pharmacy medicine (IC)

I believe that the things from the bush, older, can heal more than these pharmacy things. It's good. Look, sometimes we have a flu child at home, we take him to the hospital, they gave us syrup, the syrup ends and you do not see results. Then you take a plant, such as Eucalyptus and Basil, prepare it, and the child gets better, and really gets better. So, I believe more in the medicine we do at home, than those we purchase in pharmacy. There are doctors who ask for a lot of expensive medicine, and it does not work. But, there are some medications that they give in the health center that can heal, but it's not like the bush, we already know. In addition, the pharmacy medication spoils the stomach, but the bush, not!

**CSD B:** It is good, plants do harm when we do not know how to use them (IC)

It's good. Here everyone uses it, we know the right plan to give, and the child is good, is good because it takes the bush remedy we do. The plants are only bad when we do not have the knowledge of the benefits and risks. Since it is known how to do it, it is good, but only if we do it right.

**Central ideas and CSD - 2<sup>nd</sup> question**

For the 2<sup>nd</sup> question, the central ideas are shown in Table 3 (below), along with the proportion of the responses obtained according to gender.

**Table 3:** Central ideas of question 2 and proportion of the responses according to gender.

**2<sup>a</sup> Question** – Have you replaced (changed) the medicine prescribed by a health care professional to treat these common childhood diseases by the use of plants or animals? Why?

Central Ideas	Female		Male	
	n	%	n	%
A No, because it was not necessary	3	5.55	5	9.25
B No, what the doctor gives me, I trust	2	3.70	7	12.96
C Yes, because the medicine from the bush is better than the medicine from the pharmacy	2	3.70	1	1.85
D Yes, when I do not trust the doctor	5	9.25	3	5.55
E Yes, when I see the prescribed medicine does not work	4	7.40	0	
F Yes, because the medicine has adverse effects	7	12.96	3	5.55
G No, but I use prescribed medicine and the homemade medicine together	11	20.37	4	7.40
H No, because I seek the doctor as the last chance	2	3.70	1	1.85
I No, because I'm afraid the child might be harmed	3	5.55	1	1.85
<b>Total of responses*: 54</b>				

\* The speech of a subject could have more than one central idea.

Below (Box 2) there are the CSD listed of the IC most recurrent of the 2<sup>nd</sup> question: G; F and D.

**Box 2:** CSD of the IC more recurrent of question 2

**CSD G:** No, but I use prescribed medicine and the homemade medicine together (IC)

No, not replace it, at least I give the doctor's medicine along with homemade medicine, it is to give them together. And, the children never had any reactions. Here at home we always use the doctor's and those we do at home [...] The truth is that I'd better give the medicine from the pharmacy with our tea here. I use it all together, my tea, natural syrup, baths and medical remedies. But, one thing is true, I can use all together, but I buy the medicine that the doctor gave.

**CSD F:** Yes, because the medicine has adverse effects (IC)

I already changed a lot, especially antibiotics, which gives very bad effect on children. They say it affects a lot in the body. The doctor gave the medicine for ten days, I give three days, then the child improves, then I'll give some tea because he will improve further. Plants do no harm. My cousin had pneumonia, we used the chicken fat and tea, he was well, better than those industrialized antibiotic and it does not harm anything. These pharmacy medicines are bad, it affects the kidney, liver, heart. Plant does not hurt, because it is the nature!

**CSD D:** Yes, when I do not trust the doctor (IC)

Yes, I already changed several times. There are doctors who do not know, and think you do not know as well. The doctor spent a remedy, it was bad for the boy, so I said the woman to give what we know, because these doctors today only know to give you amoxicillin. Sometimes, they do not even listen right what the boy has and give you a remedy. I believe more in a faith healer, in my backyard plant, in older than these today's doctors do.

## Discussions

### Central ideas and CSD - 1<sup>st</sup> question

In fact, highlighting the CSD A, many people adhere to the use of natural resources because they find a practical applicability. Although, according to Helman<sup>1</sup>, this is not the only reason, since the use of such resources reflect voluntarily or involuntarily the cultural values of the individual to preserve their identity, that is, there is a broader meaning than the simple utilitarian perspective.

This valorization or over-valorization of traditional knowledge by some community members, in some cases, lead to a predilection of these resources instead of conventional medicine, as expressed in the CSD C.<sup>17,18</sup>

In the case of CSD B, the use of plants and animals in the context of traditional medicine is equivalent to the resources of the secular medicine, unlike CSD C, where traditional medicine is placed above the manufactured medicine.

During the data analysis, it was also clear, as expressed in Oliveira, Machado and Rodrigues research<sup>20</sup>, the use of these natural resources both to clinical conditions of low risk as for serious diseases, compared to the positive results demonstrated in an empirical perspective.

### Central ideas and CSD - 2<sup>nd</sup> question

Women showed more confidence in using homemade medicine associated with prescription medication for children and are more attentive to the adverse effects of marketed medication, being the main reason for the substitution of prescribed medication for homemade preparation.<sup>20</sup>

In the study of Pires *et al.*,<sup>21</sup> 48.7% of users after consultation started using only the medicine prescribed by a health professional; however, 45.0% of respondents use medicinal plants beyond the prescribed medication, while only 6.3% still use only the medicinal plant.

From the IC exposed, it is possible to compare them with the study of Veiga Junior *et al.*,<sup>18</sup> where the author highlights that “self-medication using medicinal plants is a particularly dangerous procedure when performed replacing allopathic medicine” (p.311).

In IC F, it is noted that the exchange of the prescribed medication by the use of medicinal plants is because the concept that the allopathic medicine has adverse effects, while the use of plants is safer. This was also evidenced in Silva research<sup>22</sup> developed in a Basic Health Unit (UBS), where 51% of respondents said that medicinal plants do not cause health problems, and 43%

recognized the self-medication with medicinal plants.

According to Veiga Junior *et al.*,<sup>18</sup> the most recommended combination would be: conventional medicine with the popular one, where the author points out that, in fact, this association would be accepted, as already happens in other countries, such as India.<sup>23</sup>

Given the above results, it is worth stressing that the health professional should not be worried about judging or establishing conflict of values, but they must be committed to seek alternatives to facilitate, where possible, the integration of different practices.<sup>24</sup>

When the health worker does not establish this attitude, it can be said that communication is usually hindered in the relationship between professional and client-patient. This is because when the set of practices based on culturalized knowledge are not understood, or it is refused to know it, it becomes difficult, if not impossible, to establish a trust relationship to guide the treatment plan and be effective.<sup>24</sup>

However, it should be noted that they do not have to stimulate what they do not believe to be practical for the patient, or encourage the use of techniques that may be a clear risk to their clinical condition, or hinder their development. However, the health professional cannot avoid contact, approach, knowledge about the patients and their social context, and these aspects must be considered during the survey of health history, something advocated by science as Ethnicity-nursing, for example.<sup>25</sup>

Also in this context, Mello<sup>26</sup> defended the appreciation of the cultural aspects of the population, considering that a strategy for the membership of users in health promotion, from the moment in which communication becomes possible to know a different universe, in some cases, can lead viable alternative therapies for health professionals.

In addition, it is possible to plan the therapeutic approach to use it with the client-patient, discouraging behavior causing health risks, or encouraging the behavior displayed, when possible.<sup>27-29</sup>

Thus, the client-patient or health professional should not be deprived of the knowledge of each other, but it is necessary to establish a mutual exchange of information that enriches the process of care, interpersonal relationships and build their own individuality.<sup>1</sup>



## Conclusion

The research showed that considering cultural aspects in care approach to children's health is important, and in general, it is a valued behavior by the residents of the traditional community of Sto. Antônio.

Furthermore, the culturally accepted consideration of care may be seen as a secure link to establish better communication, with the potential to guide all therapeutic courses of the diseases.

However, when such cultural aspects become unknown, neglected or reviled by health professionals during consultations or home visits, they can be configured in an impassable barrier, hindering adherence to treatment plan and consequently the general conditions of health and child's recovery.

In this way, health professionals are encouraged to include behaviors that allow greater contact with local cultures in their care practices. Thus, it is possible to measure what resources are used and how they can interfere with prescribed therapy. In addition, medical science professionals should prove to be attentive to new approaches and alternative health care, expanding their knowledge and expanding their acting beyond the systematic knowledge, giving a truly comprehensive care in health.

## References

- Helman CG. *Cultura, Saúde & Doença*. 5 ed. Porto Alegre: Artmed (2009): 432p.
- Araujo AM. *Medicina Rústica*. 3 ed. São Paulo: Martins Fontes (2004): 380p.
- Almeida CBS de. *Medicina Mestiça: Saberes e Práticas Curativas nas Minas Setecentistas*. São Paulo: Annablume (2010): 184p.
- Fuentes MP. ¿Una medicina efectiva entre culturas?: La experiencia de un programa de salud de atención primaria en comunidades indígenas de la selva amazónica ecuatoriana. *Index Enferm* 19.2-3 (2010): 208-212.
- Tomeleri KR, Marcon SS. General practice of teenage mothers caring for their children. *Acta paul. enferm* 22.3 (2009): 272-280.
- Mello DF de, Barros DM, Pinto IC, Furtado MCC. Seguimento de enfermagem: monitorando indicadores infantis na saúde da família. *Acta paul. enferm* 22.6 (2009): 748-754.
- Santos MEA, Quintao NT, Almeida RX de. Avaliação dos marcos do desenvolvimento infantil segundo a estratégia da atenção integrada às doenças prevalentes na infância. *Esc. Anna Nery* 14.3 (2010): 591-598.
- Pina JC, Mello DF, Mishima SM, Lunardelo SR. Contribution of a shelter-based Integrated Management of Childhood Illnesses Program for children under the age of five years. *Acta paul. Enferm* 22.2 (2009): 142-148.
- Saparoli ECL, Adami NP. Avaliação da qualidade da consulta de enfermagem à criança no Programa de Saúde da Família. *Acta paul. enferm* 20.1 (2007): 55-61.
- Lefevre F, Lefevre AMC. O discurso do sujeito coletivo: um novo enfoque em pesquisa qualitativa (desdobramentos). *Caxias do Sul: EDUSC* (2005): 256 p.
- Lefevre F, Lefevre AMC. Saúde, empoderamento e Triangulação. *Saúde e Sociedade* 13.2 (2004): 32-38.
- Brasil. Ministério do Meio Ambiente (MMA). *Desenvolvimento Rural – Povos e Comunidades Tradicionais*. (2014) Disponível em: <<http://www.mma.gov.br/perguntas-frequentes?catid=16>>. Acesso em: 14 jan.
- Augusto LGS, Goes L. Compreensões integradas para a vigilância da saúde em ambiente de floresta: o caso da Chapada do Araripe, Ceará, Brasil. *Cad. Saúde Pública* 23.4 (2007): s549-S558.
- Albuquerque UP, Lucena RFP, Cunha LVFC da (org.). *Métodos e Técnicas na pesquisa Etnobiológica e Etnoecológica*. Recife: NUPEEA (2010): 559p.
- Selltiz C (org). *Métodos de pesquisa nas relações sociais*. São Paulo: E.P.U (1974): 118p.
- Fontanella BJB, Ricas J, Turato ER. Amostragem por saturação em pesquisas qualitativas em saúde: contribuições teóricas. *Cad. Saúde Pública* 24.1 (2008): 17-27.
- Silveira PF da, Bandeira MAM, Arrais PSD. Farmacovigilância e reações adversas às plantas medicinais e fitoterápicos: uma realidade. *Rev. bras. farmacogn* 18.4 (2008): 618-626.
- Veiga Junior VF da. Estudo do consumo de plantas medicinais na Região Centro-Norte do Estado do Rio de Janeiro: aceitação pelos profissionais de saúde e modo de uso pela população. *Rev. bras. farmacogn* 18.2 (2008): 308-313.
- Neto FRG, Almeida GSSA, Jesus NG, Fonseca MR. Estudo Etnobotânico de plantas medicinais utilizadas pela Comunidade do Sisal no município de Catu, Bahia, Brasil. *Rev. bras. plantas med* 16.4 (2014): 856-865.
- Rodrigues AP, Andrade LHC. Levantamento etnobotânico das plantas medicinais utilizadas pela comunidade de Inhamã, Pernambuco, Nordeste do Brasil. *Rev. bras. plantas med* 16.3 (2014): 721-730.
- Pires IFB, Souza AA, Feitosa MHA, Costa SM. Plantas medicinais como opção terapêutica em

- comunidade de Montes Claros, Minas Gerais, Brasil. *Rev. bras. plantas med* 16.2 (2014): 426-433.
22. Silva RS da, Matos LSL, Araújo EC de, Paixão GPN, Costa LEL, Pereira A. Popular practices in health: self-care to wounds of users of medicinal plants. *Rev enferm UERJ* 22.3 (2014): 389-95.
23. Santos RL, Guimaraes GP, Nobre MSC, Portela AS. Análise sobre a fitoterapia como prática integrativa no Sistema Único de Saúde. *Rev. bras. plantas med* 13.4 (2011): 486-491.
24. Braga CG. Enfermagem transcultural e as crenças, valores e práticas do povo cigano. *Rev. esc. enferm. USP* 31.3 (1997): 498-516.
25. Leininger, M, Mcfarland MR. *Transcultural nursing: concepts, theories, research & practice*. 3 ed. New York: McGraw-Hill (2002).
26. Mello CHMS. A valorização dos aspectos culturais como estratégia para melhorar a adesão da comunidade. Aurora (2012).
27. López L, Cataño N, López H, Velásquez V. Diversidad cultural de sanadores tradicionales afrocolombianos: preservación y conciliación de saberes. *Aquichan* 11.3 (2011): 287-304.
28. Maia SMS, Silva LR da. Saberes e práticas de mães ribeirinhas e o cuidado dos filhos recém-nascidos: contribuição para a enfermagem. *Rev. Enf. Ref.* 3.7 (2012): 131-138.
29. Silva Júnior FJG da, Ferreira RD, Araújo OD de, Camêlo SMA, Nery IS. Assistência de enfermagem ao portador de Hanseníase: abordagem transcultural. *Rev. bras. enferm.* 61.spe (2008): 713-717.

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