The Use of Folk Remedies Among Children in an Urban Black Community: Remedies for Fever, Colic, and Teething

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The Use of Folk Remedies Among Children in an Urban Black Community: Remedies for Fever, Colic, and Teething

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ABSTRACT. *Background.* **Folk remedy use is universal, occurring in all cultures. Folk remedies have been and still are relied on in the black community. In this study, folk remedies refer to herbs, over-the-counter medications, and items traditionally used for cooking that are used to treat a variety of ailments.**

Objective. **To identify folk remedies used to treat fever, colic, and teething among black children in Detroit, Michigan.**

Methods. **Structured interviews were conducted with caregivers of healthy black children <2 years of age who were patients of the general pediatric clinic at Children's Hospital of Michigan. Descriptive analysis of the frequency distribution of the responses was performed.**

Results. **One hundred seven caregivers agreed to participate. All participants were familiar with the use of folk remedies. Most caregivers learned of these remedies from their mothers or grandmothers. Older parents were more likely to use folk remedies, but there was no difference in remedy use among different levels of maternal education.**

Conclusions. **The knowledge and use of folk remedies were active in this black community. Their use seems to be cultural, rather than attributable to decreased access to health care. Physicians should be aware of these remedies, to educate families about remedies that may be harmful. Most remedies used pose no threat to health. In some cases, remedies may be blended with traditional medical treatments to ensure better patient compliance.** *Pediatrics* **2005;115:e297–e304. URL: www.pediatrics.org/cgi/doi/10.1542/peds.2004-1443;** ***folk medicine, black, children, urban.***

Folk remedy use has been documented in many cultures.[1–15] Because of this and the possible impact on medical care, health beliefs and traditions should be considered during the treatment of children. Historically, folk remedy use has been associated with a lack of access to health care because of a shortage of physicians, language or cultural barriers, socioeconomic status, or mistrust of physicians.[2,3] The current use of folk remedies is attributable to the fact that patients consider them to be effective and to the fact that these traditions are passed from generation to generation and have become part of the culture.[1–6]

There has been a disproportionate lack of access to health care service for black people, especially in the lower socioeconomic classes.[3,16–20] Folk remedies have been and still are relied on in these groups, usually without physicians' knowledge.[3–6] Physicians should be aware of the use of these remedies and their potential harmful effects, to negotiate more effectively with families regarding treatment plans that are medically safe, effective, and culturally acceptable.

In the cultural health care system described by Kleinman et al,[21,22] 3 health care sectors coexist and overlap, ie, the professional sector (traditional biomedical health care), the popular sector (self-treatment, family-based care, and community-based care), and the folk sector (nonprofessional practitioners and alternative therapies). Of the 3 sectors, the professional sector is the latest to emerge in this country, with the folk and popular sectors having roots in traditional medical practices before the appearance of modern medicine.[5] After medical schools were established in the United States, the professional sector became the authoritative provider of health care; however, it was not always convenient or affordable.

Folk medicine consists of alternative practices and therapies in the popular and folk sectors of health care that are used by members of a cultural minority group. Folk remedies have been and still are relied on by different ethnic minorities for many reasons, including health beliefs, lack of modern, professional, medical care, and economic factors. As the health beliefs and traditions of different ethnic groups have come to the attention of physicians, there has been increasing interest in this health system.

Folk remedies are herbs, food products, or household items that are recommended by members of the lay community and are used by all health sectors.[2] Specific remedies tend to vary among cultural minority groups, although there is some overlap. Folk remedy use for children have been studied in various ethnic groups, including Southeast Asian and Hispanic groups. There is little information published in the modern medical literature about the use of folk remedies among black children and the health belief system of black people.[4,7,8]

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Black folk medicine developed from the combination of African and Native American traditional medicine during European colonization of the southeastern coast of North America, out of necessity because of the paucity of physicians.[4,5] The blending of Native American, European, and African healing traditions created what is known as "rootwork," so named because many of the medicines used came from the roots of plants.[5,6] Even with the increase in the number of physicians after the Civil War and the emancipation of slaves, rootworkers were still popular health care providers in both white and black rural Southern communities, because they usually lived in the local community, were trusted, and were affordable.[5] The traditions and practices of healing used by rootworkers have been and still are important parts of black folk medicine, of which some elements have evolved into a home-based system of care.[6]

One tenet of the health belief system of black people is that illness is caused by "impurities" in the body and these impurities must be purged through the urine, the stool, or the skin (via rashes).[3,4,6] For this reason, many of the folk remedies used are laxatives (cod liver oil, castor oil, and senna) or mild diuretics (herbal teas). Other causes of illness in this health belief system include exposure to the elements (wind, cold, and rain), filth, improper diet, and irregular bowel movements.[3,4] Black caregivers systematically ensure that their children are well fed, are protected from changes in weather, and are kept clean. They rely on various remedies that have been passed on through generations to keep their families healthy. As black people migrated from the South in the early 1900s to the northern industrial cities, their traditions and culture came with them, and folk remedies derived from older traditions are still used by black families today.[3–8] Previous reports also documented current use of folk remedies in Midwestern urban black communities.[3,4,7,8] These and other reports documented that families tend to combine folk remedies with modern medicine to maintain good health and to treat acute and chronic illnesses.[1–9,11,13]

One of us (L.C.S.), while a member of a pediatric group practice in Detroit, observed that folk remedies were commonly used for children before parents sought the care of a physician. A survey of the parents of children in that practice found that all had used a home remedy to treat their children at one time or another. This observation led to the study described in this article.

The objective of this study was to identify folk remedies used to treat fevers, teething, and colic among black children in a Midwestern urban community. We also reviewed the medicinal and possible harmful effects of certain folk remedies among children.

METHODS

Patients were recruited from the general pediatric clinic at Children's Hospital of Michigan (Detroit, MI), which is the pediatric resident continuity clinic. The patients who receive their care from this clinic are from the surrounding Detroit community, which is 82% black. The patients who attend this clinic are from a community in which 60% of the families have an annual household income of less than $25 000 and 47% of the children live below the poverty level.[21,22] Approximately 75% of the patients in this clinic receive Medicaid health insurance. The institutional review board of Wayne State University approved this study.

A convenience sample of caregivers of healthy black children between the ages of 0 and 2 years who were patients of the general pediatric clinic were asked to participate in this study. A trained black research assistant recruited eligible patients, obtained informed consent, and conducted structured interviews with each enrolled caregiver. Children with chronic illnesses and those who were acutely ill at the time of the visit were excluded from this study.

The enrolled caregivers were asked 30 yes/no questions and 9 open-ended questions regarding their knowledge and use of remedies for fever, teething, and colic. The questions regarding the remedies were chosen from the results of pilot questions asked at the beginning of this study, as well as documentation of remedies used by black people in other studies.[4,7,8] Caregivers were asked if they had heard of specific remedies, if they had used these treatments, and from whom they had learned of these remedies. The answers to the questions were recorded on a checklist developed for ease of recording and data entry. The interview required ~20 to 30 minutes to complete.

Data were collected during a 6-month period. One hundred seven of 116 interviews were completed. Descriptive analysis of the responses to these questions was performed through examination of the frequency distribution of responses. Although open-ended questions had the potential to generate as many answers as there were participants, most fell into broad categories and were analyzed in the same manner as the yes/no questions. Relationships between knowledge and use of home remedies and maternal age and maternal education were tested with χ^2 analyses with SPSS version 10.0 software (SPSS, Chicago, IL). The demographic data (maternal age and maternal education), rather than insurance type, was surveyed because there is not much variation in insurance types for this clinic population (ie, all families had some sort of health insurance and access to the clinic), and it was thought that there would be more variation in maternal age and education. In cases in which >20% of the cells had an expected frequency of <5 or any cell had an expected frequency of <1, exact probability values were calculated with StatXact 3 for Windows (Cytel Software Corporation, Cambridge, MA).

RESULTS

Subjects and Demographic Features

One hundred seven of 117 caregivers agreed to participate, for a response rate of 92%. All of those who participated (Table 1) confirmed using at least 1 herbal or food product remedy to treat their children, irrespective of the educational level of the parent and the age of the child. Because the majority of respondents were mothers (83%), the relationship of maternal age and education to the use of home remedies was also documented.

Home Remedies to Treat Fever, Colic, and Teething

Factors Assessed

The home remedies that the caregivers were familiar with and used are listed in Table 2. Also shown are other remedies that the caregivers had heard of to treat these conditions. Sources from which caregivers learned of these remedies (based on close-ended questions) are listed in Table 3.

Fever

Caregivers were asked about their knowledge and use of acetaminophen (Tylenol, McNeil-PPC, Inc, Fort Washington, PA), cool baths, and isopropyl alcohol to treat fever (Table 2). They were also asked to list other remedies for fever with which they were familiar. The majority of caregivers had knowledge

TABLE 1. Demographic Data for the Study Population

No. of caregivers approached	116
No. of caregivers who participated	107
Response rate, %	92
Participants who were mothers, %	83
Maternal age, no. (%)	
15–19 y	15 (14)
20–29 y	53 (50)
30–39 y	17 (16)
>40 y	13 (12)
Unknown	9 (8)
Maternal education, no. (%)	
Some high school	29 (27)
High school graduate/GED	39 (36)
Some college	32 (30)
College graduate	7 (7)
Maternal place of birth, no. (%)	
Michigan	88 (82)
Southern United States	13 (12)
Other United States	4 (4)
Outside United States	2 (2)
No. of children in home, no. (%)	
1	47 (44)
2	29 (27)
3	11 (10)
4	10 (9)
>4	10 (9)

GED indicates General Equivalency Diploma.

of the specific remedies listed above, with most admitting to using cool baths and acetaminophen.

Although by definition not a folk remedy,[2] acetaminophen, a popular over-the-counter medication, was listed most frequently by caregivers when they were asked about fever reducers during the pilot study. Caregivers >20 years of age were more frequent users of acetaminophen ($P = .010$). There was no relationship between the use of acetaminophen and the level of education of the mother ($P = .897$). When asked how this remedy works, respondents stated that it was the medicine or the ingredients in the Tylenol that relieved the fever. Many of the caregivers stated that they learned of acetaminophen from the medical staff (37.4%).

Cool bathing to treat fever was known by most of the respondents in this study (84.3%), and almost one half (48.3%) used this remedy. There was no relationship between the use of cool water to treat fever and the age or education of the caregiver ($P = .442$ and $P = .453$, respectively). Almost 20% of the caregivers learned of this remedy from their mothers, followed by medical staff (10%) and grandmothers (8%).

Many of the respondents (71.0%) were familiar with the use of isopropyl alcohol to treat fever, and 38.3% used this remedy. Older caregivers were more likely to use isopropyl alcohol than were younger caregivers ($P = .046$). There was no relationship between the knowledge or use of alcohol and the level of education ($P = .578$). When caregivers were asked how this remedy works, reasons given included opening the pores, strengthening the body, preventing chilling of the blood, and cleansing the body. Caregivers listed their mothers most frequently (16.8%) as the source of information on this remedy. Other remedies listed by caregivers to treat fever included giving children cool drinks, undressing them, administering ibuprofen, placing sliced potatoes or onions in the socks, and warming the feet.

Colic

Few positive responses were given by caregivers when they were questioned about chamomile and gripe water (Table 2). There was more familiarity with catnip tea and Castoria (Mentholatum Company, Inc, Orchard Park, NY), an over-the-counter senna extract. When asked to name other remedies, almost 40% of caregivers gave responses, which included motion, herbs, massage, and other over-the-counter medications.

Of the remedies listed above, respondents were most familiar with catnip to treat colic (34.6%); however, only 8.4% had used this remedy. Older caregivers were more familiar with and more likely to use catnip tea ($P = .019$). There was no relationship between the use of catnip tea and the caregiver's education ($P = .138$). Of those questioned, only 1 person had an idea regarding how catnip worked, ie, by cleaning out the intestinal system. Caregivers who listed a source learned of this remedy from their mothers (4.7%) and grandmothers (4.7%).

Castoria, an over-the-counter senna product, is used to treat colic and constipation. Although this too, by definition, is not a folk remedy, 26.8% of the respondents were familiar with this treatment. However, only 4.7% of the respondents had used this remedy, and they tended to be older ($P = .026$). No one was able to offer an opinion regarding how Castoria works.

None of the caregivers had used chamomile to treat colic, although 7.8% had heard of it. No one was able to offer an opinion regarding how chamomile worked.

Gripe water (a solution containing dill, fennel, and mint extracts that is sold over the counter in Indian food stores in the United States and in pharmacies in Canada) was not commonly used to treat colic in this population. Only 7.5% of the respondents had heard of this remedy, and none had used it. No one was able to explain how this remedy worked or to name a source for it.

Teething

Another popular over-the-counter medication, Orageel (topical benzocaine gel; Del Pharmaceuticals, Plainview, NY), was listed most frequently by caregivers in the pilot study to reduce discomfort from teething (Table 2). There was no significant relationship between the use of this remedy and the age and level of education of the caregiver ($P = .086$ and $P = .575$, respectively). When caregivers were asked how this remedy works, responses included the statements that it numbs the gum area, the ingredients make it work, it relieves pain, and the gel cools down the gums. Caregivers learned of this remedy from their mothers (19.6%) or from the medical staff (15.9%).

Some of the respondents were familiar with whiskey as a treatment for teething (34.6%), and it was occasionally used to numb the gums of a teething infant. When asked how this remedy worked, answers included that the whiskey numbs the gums, it makes the child sleepy, and the alcohol relieves the discomfort.

TABLE 2. Home Remedies for Fever, Colic, and Teething

Condition	Remedy	Knowledge, % (N = 107)	Use, % (N = 107)
Fever	Acetaminophen*	98	77.6
	Cool bath*	85	48.3
	Isopropyl alcohol*	71	38.3
	Cool drinks/popsicles†	11.2	0
	Undress child†	10.3	0
	Ibuprofen†	10.3	0
	Warm feet†	8.4	0
	Potatoes or onions in socks†	6.5	0
Colic	Catnip*	34.6	8.4
	Senna extract*	25.2	4.7
	Other (asafetida, paregoric, or bicarbonate)†	13.1	0
	Chamomile*	7.5	0
	Walk†	6.5	0
	Cigarette smoke†	5.6	0
	Simethicone drops†	4.7	0
	Vacuum/steam†	3.7	0
	Cover head†	3.7	0
	Massage†	2.8	0
	Gripe water*	1.9	0
Teething	Over-the-counter benzocaine gel*	97.2	57
	Teething object†	35.2	7.5
	Whiskey*	34.6	1.9
	Penny*	16.8	0
	Ice cubes/popsicles†	13.3	0
	Egg†	11.4	0
	Spices (asafetida, cloves, or vanilla)†	4.8	0

* Responses given in closed-ended questions.
† Responses given in open-ended questions.

TABLE 3. Sources From Which Caregivers Obtained Information on Remedies to Treat Fever, Colic, and Teething

Condition	Remedy	Source, No. (%) (N = 107)						
		Mother	Grandmother	Relative	Friend	Medical Staff	Unknown	Other
Fever	Acetaminophen	11 (10.3)	2 (1.9)	3 (2.8)	0	40 (37.3)	3 (2.8)	8 (7.5)
	Cool bath	20 (18.7)	9 (8.4)	2 (1.9)	2 (1.9)	11 (10.3)	6 (5.6)	2 (1.7)
	Alcohol	18 (16.8)	9 (8.4)	5 (4.7)	4 (3.7)	4 (3.7)	11 (10.3)	2 (1.7)
Colic	Catnip	5 (4.7)	5 (4.7)	1 (0.9)	3 (2.8)	0	4 (3.7)	0
	Senna	4 (3.7)	0	2 (1.9)	2 (1.9)	0	0	1 (0.9)
	Chamomile	1 (0.9)	1 (0.9)	2 (1.9)	0	0	2 (1.9)	0
	Gripe water	0	0	0	0	0	4 (3.7)	0
Teething	Benzocaine	21 (19.6)	4 (3.7)	3 (2.8)	4 (3.7)	17 (15.9)	0	9 (8.4)
	Whiskey	7 (6.5)	1 (0.9)	4 (3.7)	4 (3.7)	2 (1.9)	0	0
	Penny	2 (1.9)	1 (0.9)	2 (1.9)	0	0	0	0

Not all participants were able to name a source of information for various remedies.

Few caregivers knew of (16.8%) and fewer used (1.9%) a penny tied on a string around the infant's neck to treat teething. One respondent stated that the remedy worked because of the copper in the penny. Other remedies listed by caregivers included teething objects, ice, eggs, and various spices.

Folk Remedy Use and Maternal Age and Education

Overall, older caregivers were more likely to use remedies to treat fever and colic, compared with younger caregivers, and they were more familiar with remedies for colic. For teething, teenaged mothers and caregivers >40 years of age were more familiar with and more likely to use home remedies. There was little difference in the use of home remedies among different educational levels of caregivers.

DISCUSSION

Development of Folk Remedies

Black families developed a support network and used remedies that were handed down through their families to maintain good health and to treat acute illnesses. Although access to medical care in urban areas has improved over the years with the institution of medical insurance and other services, many black families continue to rely on folk remedies to treat minor illnesses affecting themselves and their children.[3,4] Part of this use may be attributable to access to health care still being a problem, even with a system of social services in place for lower socioeconomic groups. However, the use of folk remedies across all maternal educational levels in this study suggests that their use is also cultural and that folk remedies would be used in this community even with adequate access to medical care. The existence of this traditional medical system is widespread in both urban and rural areas and has been documented in the literature.[3–6] This traditional medical system is also used in conjunction with the professional sector of the cultural health care system, as evidenced by the participants in this study, who used both folk remedies and the general pediatric

clinic as health care sources for their children. Also, medical personnel at times recommend folk remedies to their patients, as documented in Table 3, thus supporting the interaction and overlap of the cultural health care system described by Kleinman et al.[21,22] The reasons for this "medical pluralism" are that folk remedies are relatively inexpensive and readily available, and some families are reluctant to relinquish traditional beliefs but want to gain the benefits of modern technology.[5,6]

A review of the literature indicates that home/folk remedy use is not limited to the black culture. Many ethnic/cultural groups use home/folk remedies for similar reasons as do black people, ie, limited financial resources, discomfort with the mainstream medical establishment, convenience, tradition, and poor access to health care providers.[1,3,4,9,10,23–31] For example, asafetida, baking soda, and catnip tea are also documented treatments for colic in the Appalachian culture, and herbal teas are documented treatments for fever in the Hispanic and Appalachian cultures.

Within the black culture, the use of folk remedies among children is a dynamic process that continues to evolve with time. Many of the black families that Snow[3,4] interviewed between 1980 and 1987 relied on herbal folk remedies (such as catnip, chamomile, asafetida, or tobacco smoke) and sometimes would not use prescribed medication in favor of these remedies. Snow found that sometimes treatments prescribed by physicians did not fit into the families' explanatory model of the cause of illness, and the elders of the extended families, who provided much of the child care, were more comfortable with traditional remedies. The families that she studied were demographically similar to the families studied in this project, in that they were in the lower income brackets and received primary care in a pediatric resident-training clinic. In our study, the families interviewed had knowledge of the remedies described by Snow,[3,4] although their use of herbal folk remedies was less common and they tended to use over-the-counter medications more often. The medical pluralism demonstrated in the black community in previous studies and currently, however, remains consistent. It is expected that the types of remedies will continue to change with time, as families become more familiar with alternative medicine.

The use of folk remedies is rarely discussed with health care providers, for fear of disapproval or misunderstanding or concern that this information could invite a visit from the Department of Social Services.[3,4,9,10] Health care providers often hear of these remedies only when a child is treated in the emergency department because of a complication of using a remedy at home.[9,10,25–30] Therefore, parents and caregivers should be questioned regarding the use of folk remedies, and appropriate information regarding some of the potential dangers should be discussed with them.

Handing Down Traditions

The majority of the remedies documented in this study were learned from the caregiver's mother, grandmother, or older relative (Table 3). This has long been the tradition of child care for black families, because there was, and still is, a heavy reliance on extended families.[4]

The questionnaire used asked the mother's place of birth but did not ask the birthplace of the grandparents or great-grandparents of the child; therefore, the geographic origin of the remedies was not determined in this study. It is known that most black people in Detroit migrated from the rural South to seek employment in the automobile factories in the early part of the 20th century and during World War II.[24]

Rationale for Some of the Remedies Used

Proper child rearing in the black community revolves around keeping children protected from the cold, keeping them clean "inside and out," and keeping them properly fed.[4] As mentioned previously, one of the components of the explanatory model of health and illness in traditional black culture involves the presence of impurities in the body.[4,6] These impurities may enter the body through any orifice, the anterior fontanelle, the soles of the feet, and the pores. Illness results from the body not being able to purge the impurities. Fever may result from the accumulation of impurities. The majority of caregivers in this study treat fever by cooling the body. Undressing the child, sponge bathing, and using rubbing (isopropyl) alcohol are used to accomplish this. The application of heat to "open the pores" and to release the impurities from the body is also used, leading to the concept of warming the feet to treat fever (Table 2). Having a child wear sliced potatoes or onions in his or her socks to draw the impurities out of the body through the soles of the feet is also a remedy for fever (Table 2).

Colic is thought to be attributable to exposure to wind, which causes cramping and a build-up of intestinal gas.[4] Prevention usually involves bundling and avoiding extremes of temperature and wind. Treatment of colic by caregivers in this study included herbal teas (catnip and chamomile) and Castoria. Previous studies documented the use of chamomile, tobacco, catnip, ginger tea, bicarbonate, and burping among black children.[4,8] These and many of the other remedies listed are used to treat abdominal cramping and to induce stool and gas elimination. Senna (*Cassia senna*) is indigenous to North, Central, and South America. Its active ingredients, sennosides A, A1, and B, stimulate propulsive contractions of the colon, resulting in accelerated intestinal passage.[32] It is given as an elixir (Castoria) or as tea. Catnip (*Nepeta cataria*) was imported from Europe during the colonization of North America and has been used widely in this country as an antispasmotic as well as a remedy for colds and nervous disorders.[4,32,33] It is prepared as a tea, which also has diuretic effects. Of interest, some caregivers listed asafetida and tobacco smoke as remedies for colic. Asafetida (*Ferula foetida*), an herb used in Indian cooking, was commonly used to treat abdominal discomfort among children and adults in Southern black and Appalachian communities.[4,32,33] In animal experiments, this herb was shown to have a mild

mutagenic effect on *Salmonella typhimurium*. Traditionally, in Chinese and Indian cultures, it is used to treat intestinal parasites, constipation, and flatulence.[32] Tobacco (*Nicotiana tabacum*) was a common remedy used initially by Native Americans to treat a variety of ailments.[33] Snow[4] documented the use of tobacco smoke for the treatment of colic among black infants. Tobacco has been shown to decrease the muscle tone of the gastrointestinal tract.[32]

Treating teething discomfort involves numbing the gums or giving the infant an object to chew (eg, bones and teething rings).[34,35] Uncommon remedies in this study involved the belief that teething is caused by impurities in the body. Therefore, placing a new penny on a string and loosely tying it around an infant's neck draws out the poisons in the body, causing the new penny to turn black. The use of a raw egg (placed in a sock or in a drawer) apparently diverts from the child the impurities that would cause teething discomfort. Another unusual remedy for teething, which was cited by 2 of the caregivers, was to have a puppy lick the child's mouth. These uncommon remedies (coins, eggs, and puppies) have been documented in the literature, although not attributed to any specific ethnic group.[35]

Harmful Practices

Most of the remedies used by the caregivers in this study have not proved to be harmful. However, some of the remedies used are concerning because they have been associated with adverse effects. Table 4 lists the unusual and harmful remedies named by the caregivers in this study. The remedies shown in Table 4 were those with which the caregivers were familiar, but the actual use of these remedies was not documented. The potentially harmful remedies cited by the caregivers in this study included asafetida, bicarbonate, paregoric, tobacco smoke, rubbing (isopropyl) alcohol, whiskey, and tying a penny or buttons around the child's neck.

The use of isopropyl alcohol to reduce the body temperature is effective, because of its rapid evaporation from the surface of the skin. However, isopropyl alcohol is absorbed through the skin and large amounts used topically may be inhaled, which may cause alcohol poisoning among some children.[36]

Asafetida, which is used to treat colic and abdominal discomfort, has been associated with methemoglobinemia among young infants.[25,26,34] This is attributable to the iron molecules in hemoglobin being oxidized to the ferric state (which cannot bind oxygen), shifting the oxygen dissociation curve to the left. With a reduced oxygen-carrying capacity, infants become cyanotic. Asafetida is sold as a tincture in some pharmacies and as a powdered spice in ethnic food stores. It is also an ingredient in Worcestershire sauce.[26] Benzocaine, the main ingredient in over-the-counter topical teething anesthetics, has also been associated with methemoglobinemia through the aforementioned mechanism.[26,34]

TABLE 4. Harmful and Unusual Remedies for Fever, Teething, and Colic Listed by Caregivers

Remedy	No. of Responses (%) (N = 107)
Isopropyl alcohol*	71 (34.6)
Penny/buttons on string around neck*	19 (17.8)
Egg	13 (12.1)
Warm feet	8 (7.5)
Tobacco smoke*	7 (6.5)
Potatoes or onions in socks	7 (6.5)
Bicarbonate*	4 (3.7)
Asafetida*	4 (3.7)
Paregoric*	2 (1.9)
Puppy licks mouth	2 (1.9)
Chew on chicken bone	2 (1.9)

* Remedy may be harmful.

The negative effects of cigarette smoke, especially among infants with pulmonary disease or a family history of asthma, should discourage the practice of using cigarette smoke to treat colic. Whiskey, which is used to treat teething pain, places infants and young children at risk for ethanol poisoning and hypoglycemia.[36] Children can become intoxicated after ingesting small amounts of ethanol.

The use of bicarbonate as a home remedy to treat colic has been associated with hypernatremia and in some cases death. In 1995, Nichols et al[27] reported a case of a child with bicarbonate poisoning and reviewed the literature describing similar cases. Each child received bicarbonate as a home remedy. Caregivers used bicarbonate to treat gastrointestinal symptoms, stomatitis, and upper respiratory infections and as a formula substitute. The long-term consequences of bicarbonate poisoning varied from none to mild cognitive delays to brain death.

Two of the caregivers interviewed were familiar with the use of paregoric (tincture of opium) to treat colic. Its actions of decreasing gastric emptying and decreasing pain and its sedative effects have in the past provided the rationale for its use to treat this condition.[32] Use of this medication places infants and young children at risk for respiratory depression, however, and should be avoided. Of interest, the 2 caregivers who were familiar with paregoric were older (56 and 66 years of age) and had college degrees.

The practice of tying a penny or white buttons on a string around an infant's neck to prevent or to treat teething discomfort poses a risk of strangulation or entrapment and should be discouraged. In this study, older caregivers were more familiar with these harmful remedies than were younger caregivers. Older caregivers were also more likely to use alcohol to treat fever, catnip and Castoria to treat colic, and whiskey to treat teething discomfort.

CONCLUSIONS

Folk remedies are still used in the black community, and these remedies have been handed down through generations. Previous studies in the medical literature described the use of folk remedies among Hispanic and Asian children, but few studies documented use among black children or examined the health beliefs and rationale for their use. This study showed that there was a trend for older caregivers to use home remedies for their children. Surprisingly, there was no relationship between their use and the level of education attained by the mother. These

findings suggest that folk remedy use is not necessarily attributable to restricted access to medical care and financial poverty but represents a tradition handed down by the elders of this culture as part of child rearing.

It is important for physicians to be aware of the remedies used within the black population, so that appropriate information is obtained in medical histories and so that families can be educated about remedies that are potentially harmful. Understanding the use of folk remedies involves not only being able to list different remedies that are used but also understanding the health belief system of the population being served. Knowing this information will help ensure compliance with physician recommendations and promote a better therapeutic relationship between patient and provider.[1,2,4,9,10,34,37–44]

Questions regarding home/folk remedy use should be asked at each medical encounter, including both health maintenance and acute care visits. Asking parents and caregivers to list medications, prescribed and otherwise, may open discussions of home/folk remedy use. During history recording, use of the awareness-assessment-negotiation model described by Pachter[45] may enable clinicians to feel better prepared to address these issues. Awareness, in this model, is becoming aware of common health beliefs in the local community by researching information and talking with community members. Assessment of whether a family engages in certain health beliefs and practices is performed during the history taking, by asking the family members what they think is wrong with the patient, how the child became ill, and what has be done to treat the condition. Finally, negotiation is performed to combine biomedical therapy with traditional health beliefs and treatments. If the folk remedies are not harmful and the family members think that the child is benefiting from the therapy, then they should be supported in their efforts. If the therapy is not working, then an alternative can be suggested in a nonjudgmental manner. During acute care visits, asking parents and caregivers how they handled particular health issues before they came to the office or clinic may also facilitate these discussions. Harmful remedies should be addressed in a nonjudgmental and supportive manner, because caregivers are usually not aware of the effects of the remedies. Physicians should offer safer alternatives in these instances, while acknowledging and validating the parents' concerns regarding the illness they are treating. There are occasions when a blending of traditional medical care and folk remedies may be acceptable, as long as the folk remedies are not harmful to the patient, providing opportunities for combining folk and traditional therapies that are acceptable to both the patient and the physician.

Limitations of this study include not tracing the use of specific remedies to their geographic roots, because this might have shed more light on the rationale for their use. Also, this study was limited to an urban black community that had accessible health care; therefore, the authors were not able to demonstrate that lack of access was a determinant of folk remedy use. The practices within this population may not reflect the behavior of families with limited access to health care, and the use of folk remedies in this population may be underrepresented. Future studies should evaluate the use of folk remedies among children with chronic diseases.

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