

Use and Postures Against Natural and Homeopathic Remedies in Pediatric Patients: A Survey among Colombian Doctors

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Abstract

Background: Complementary and Alternative Medicine (CAM) has increasingly been used all over the world, not only in adults but also in children. Despite the strong interest in CAM, there are few published data on their usage in the clinical practice, especially for non-English speaking countries and for the pediatric population.

Objective: To better understand the physicians' usage, knowledge, and attitudes towards natural remedies and homeopathy, an international survey involving general pediatricians and general practitioners treating pediatric diseases was conducted in 6 countries: Germany, Russia, Bulgaria, Spain, Colombia, and Israel. In the present paper only the data referred to Colombia are discussed and compared with the overall results.

Methods: The international survey has been performed by a multi-country approach. Data were collected in May and June 2014 through a structured online questionnaire administered to pediatricians and general practitioners who treat children.

Results: In Colombia, a total of 51 physicians participated to the study: 80% of the respondents were pediatricians, and 20% were general practitioners or primary care practitioners. 12.7% of the pediatric prescriptions/recommendations referred to homeopathic preparations, and 8.6% referred phytotherapy. Natural remedies and homeopathy was commonly used together with conventional/standard drugs. Upper respiratory tract infections (42%), allergies (39%), recurrent infections (35%), sleep disturbances (32%), acute abdominal problems (26%), infant colic (23%) and behavioral problems (19%) were the most common diseases treated with homeopathy. Typical patients treated with natural remedies were children with parents who were concerned about side effects of conventional drugs (30%), and who preferred natural remedies for themselves (40%). A slight tendency to use natural remedies in younger patients (0 - 6 years) with chronic disease was reported.

Conclusions: The attitude of the healthcare professionals in Colombia appears positive to the CAM. Remarkable is the difference between homeopathic and phytotherapeutic remedies: despite the traditional use of medicine plants, in Colombia there are more prescriptions for homeopathy than for herbal medicine.

Keywords: Homeopathy; Phytotherapy; Natural Remedies; Colombia; Pediatrics; Survey

Introduction

Recent studies have shown that complementary and alternative medicine has been growing in acceptance around the world [1]: almost 40% of adults in the United States of America. It uses some form of MCA (36% in 2002 and 38% in 2007) [2,3], while adult consultations with physicians with CSF in the US. UU it increased from 13% in 2002 to 16% in 2007 [3].

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Natural remedies and homeopathic products are widely used not only in adults, but also in the pediatric population [4-7].

Despite the strong interest in the MCA and its increased use, it remains a large variable in terms of real numbers within clinical practice, mainly in terms of usage data and the reasons for choosing the MCA. This is especially true for non-English speaking countries and for the pediatric population, since most of the literature is derived from adult patients living in the USA.

To better understand the use, knowledge and positions of physicians with respect to natural remedies and homeopathy, an international survey was carried out with the participation of pediatricians and general practitioners treating pediatric diseases in 6 countries: Germany, Russia, Bulgaria, Spain, Colombia and Israel. Global survey data have recently been published in the journal *Journal Global Pediatric Health* [8]. In the present work, only the data associated with Colombia will be analyzed and compared with the general results.

Traditional medicine is widely practiced in Colombia: according to a report by the Pan American Health Organization and the World Health Organization, approximately 40% of the population has used the CAM [9,10].

In Colombia, homeopathy is recognized as a system of medicine since 1905; in 1914, the government standardized the training requirements of homeopathic doctors, and established a title protection system. Only allopathic doctors can exercise homeopathy. In recent years. An integration of homeopathy with public health services has been carried out and the education system: in 2006 the National Government organized the offer of postgraduate programs in homeopathy, and some private institutions have been recognized by the Ministry of National Education (for example, the Colombian School of Homeopathic Medicine of the University Foundation "Luis G. Páez") [11].

Despite the interest of patients and physicians, and the consolidated use of CAM in Colombia, data on the use of the adult population are limited and, as far as we know, there are no published data on the use of CAM in children. In Colombia.

Methods

Scope of the survey country

The objectives of the survey were

- (a) To provide an overview of the general position of physicians towards the pediatric use of natural remedies and homeopathy, and of the similarities or differences between countries through the use of a consistent study approach in a multinational survey;
- (b) Evaluate the potential factors that influence the use of natural remedies and homeopathy in different countries by physicians and patients; and (c) evaluate the peculiarities of the use of natural remedies and homeopathy in children upto 12 years old [8].

The global survey [8] has been conducted through a multinational approach, including Latin America (Colombia), southern Europe (Spain), Western Europe (Germany), Eastern Europe (Russia, Bulgaria), and Israel. The composition of countries was intended to be a representative sample of a great cultural variety, which highlights the differences between the countries approach.

Data collection

The survey was carried out in May and June 2014. The data were collected through a structured and managed online questionnaire for pediatricians and general practitioners treating children. The selection criteria were to have treated at least 50 pediatric patients with ages between 0 and 12 years in the 3 months prior to the survey; have practiced their specialty for at least 3 years and not more than 35 years; be at least 27 years of age and not older than 70.

The interviews in Colombia were carried out personally with input of the online questionnaire data, since physicians, in general, are less willing to participate in online surveys.

A representative sample was selected based on the specialty (pediatricians versus general practitioners), the care setting (clinic or hospital) and geographical distribution. In order to avoid any bias in the results, the text of the invitation did not indicate that the survey was related to natural remedies or homeopathy.

Questionnaire: structure and themes

Before starting the survey, the questionnaire was validated through a series of pilot interviews carried out over the telephone. The interviews were conducted in order to verify the clarity of the questions and the time required to complete the questionnaire.

The final questionnaire consisted of 31 structured questions to analyze seven subjects, as shown in table 1. The average duration of the interview was calculated in 25 minutes.

Questionnaire topics	Elements
Demographics of pediatric patients	Number Different age groups (0 to 16 years)
Prevalence among paediatric patients (0 to 12 years) treated in the previous 12 months	Frequency of prescription or recommendation of natural remedies or homeopathic medicinal products in 11 paediatric treatments
Positions towards comprehensive medicine (MI)/MCA	Consent with 8 statements positive or negative stances towards MI and MCA
Knowledge	Definition of “homeopathy” and “natural remedies”. Self-assessment of the respondent’s level of knowledge on homeopathy, probiotics, dietary supplements, vitamins, phytotherapy, minerals and anthroposophical medications. Factors that influence the use of natural remedies.
Frequency	Comparing the frequency of use of natural remedies and homeopathy against conventional or traditional medicine
	Positions towards prescription or recommendation List of potential factors
natural remedies or medicines	Consent with a list of affirmations
Homeopathic Interest in information on natural remedies and homeopathy	What topics are doctors most interested in? Impact of information on specific topics about the motivation to use natural remedies

Table 1: Questionnaire: structure and topics.

Statistic analysis

Descriptive statistics were used to summarize the responses between countries or from each specific country to the individual questions. We analyzed comparisons of subgroups (for example, differences between countries) with binomial tests and χ^2 tests. Associations were identified between the characteristics of the doctor (demographic characteristics, postures, behaviors, knowledge) and the frequency of recommendation or prescription of homeopathic medicines or herbal medicine due to significant differences between frequent and non-frequent users of the respective treatment option.

Results

Description of the sample

In all countries, a total of 582 physicians participated in the study according to the following distribution by country: Colombia, n = 51; Spain, n = 150; Germany, n = 151; Russia, n = 150; Bulgaria, n = 50; and Israel, n = 30.

In Colombia, 80% of the respondents were pediatricians, and 20% were general practitioners or primary care physicians.

The median age of physicians participating in Colombia was 46 years of age with 17 years of exercise, according to the data reported in the global survey (average age: 48 years, years of practice of the specialty: 19).

In the global survey, the distribution between men and women was very similar (M = 56%, H = 44%), while in Colombia the majority were men: 61% versus 39%.

Almost half of the participating Colombian physicians (47%) were in charge of some academic course or had an appointment in an academic centre or research institute; in the global survey, the percentage was considerably lower (19%).

On average, physicians received 461 patients in a 3-month period, with a majority of patients aged 0 to 6 years (178 patients for the range of 0 to 2 years, 113 patients for the range of 3 to 6 years; 64 patients for the range of 7 to 12 years, 45 patients for the range of 13 to 16 years).

More than 40% of pediatric patients suffered from upper respiratory infections. Other frequent causes of doctor visits of pediatric patients aged 0 to 12 years were due to acute abdominal complaints (27%), allergies (27%), recurrent infections (17%), earache (16%), infantile colic (13%) and chronic abdominal ailments (13%).

Use of natural remedies and homeopathy in pediatric patients

In the global survey, almost all respondents (99%) recommended or prescribed natural remedies (phytotherapy or vitamins/minerals/supplements [VMS]) to their pediatric patients (0 to 12 years) in the previous 12 months. The percentage of physicians who recommend or prescribe homeopathic medicines in Colombia was 61%.

Table 2 shows the percentage of conventional/traditional medicines, VMS, phytotherapy or homeopathy in all prescriptions/recommendations given to pediatric patients (0 to 12 years) in the 12 months prior to the study.

Type of medicine	Colombia (n = 51)	Total (N = 582)
Medications conventional/traditional*	48.5%	43.3%
Vitamins, minerals and Supplements in (VMS)	30.2%	24.9%
Natural extracts of origin Vegetable (herbal medicine)	8.6%	16.9%
Homeopathy	12.7%	15.0%
Total	100%	100%

Table 2: Percentage of prescriptions/recommendations for conventional/traditional medicines, vitamins/minerals/supplements, phytotherapy or homeopathy given to paediatric patients (0 to 12 years) in the 12 months prior to the study.

* No homeopathic medications or natural remedies.

- Individual remedy, as well as combinations of different active homeopathic ingredients.

In Colombia, the percentage of pediatric prescriptions and treatment recommendations with phytotherapeutic medicines is 8.6%, and 12.7% with homeopathic preparations: among all countries, only in Colombia and Spain, homeopathy is used more than phytotherapy.

Natural remedies are used in combination with conventional/traditional medicines in more than three quarters of patients (77%), and two out of three physicians (66%) use homeopathy in combination with conventional medications.

The treatment of upper respiratory tract infections and allergies is where homeopathic medicines were most frequently used. Other conditions treated with homeopathic remedies were recurrent infections, sleep disorders, acute abdominal problems, infant colic and behavioral problems.

The postures and the behavior of the parents were the most important factors that physicians considered when prescribing natural remedies. The most representative patients treated with natural remedies were children with parents worried about the side effects of conventional drugs (30%), and who opted for the use of natural medicines for themselves (40%). There was a slight tendency to use natural remedies in younger patients (0 to 6 years) with chronic diseases.

In Colombia, 96% of the doctors who participated in the survey said that they had talked about natural remedies with the parents of their patients: in 35% of the cases these discussions originated at the initiative of the parents.

Personal use of VMS and conventional/traditional medications is common among physicians. While homeopathic medicines are used by two thirds of doctors, phytotherapy is used by half of them.

Definition of homeopathy, natural remedies and level of knowledge to qualify the level of knowledge about homeopathy and natural remedies, physicians were asked to provide their own definition of both terms. Next, a definition of homeopathy and a definition of natural remedies were offered to ensure that all respondents understood both terms homogeneously (see the next box).

Homeopathy (definition provided)

'Homeopathic preparations may contain substances either in an individual state or a combination of dilutions in series and agitated substances (succussion). Combined preparations are combinations of two or more safe and active homeopathic agents. Formulas for combined preparations are based on the clinical experience of therapists actively practicing homeopathy. Every combination it's constituted with the end to induce the individual active agents treating the disease concerned with cumulative or synergistic force.'

Natural remedies (definition provided)

"Natural remedies are all products that only contain vitamins, dietary supplements – for example, melatonin, fish oil, (mega) vitamins) and minerals – (VMS), as well as all products that contain only unprocessed or slightly processed extracts of origin (phytotherapy) or a mixture of different natural ingredients”.

In Colombia, one third of the doctors spontaneously mentioned the phrase “alternative healing method” when they were asked to define the term homeopathy. “The principle of similarity” -according to Hannheman’s principle of “like cures like” - and the concept that homeopathic remedies are composed of potentiated substances follow him closely (31% and 29%, respectively). On the other hand, regarding natural remedies, a little less than 50% of the doctors described the natural remedies spontaneously as products that are produced “naturally” and 41% of them mentioned that they were “produced from of plants or plants. “ In general, most doctors differentiate between homeopathy and natural remedies.

Country	Vitamins Homeopathic			Phytotherapeutics					
	Poor/Extreme Modera Excele			Poor/and moder Excelen poor/and Modera					
	Damente poor	Of	Excellence To	Xtremad mentepobre	Ado	To	Etremad amente poor	do	Nte
Total (N = 582)	6%	54%	40%	38%	44%	18%	52%	39%	9%
Colombia (N = 51)	4%	63%	33%	80%	18%	2%	78%	16%	6%

Table 4: Own level of knowledge about vitamins, phytotherapeutics and homeopathic in Colombia and in the global survey.

Another indicator was the awareness of the level of knowledge of doctors about homeopathy, probiotics, dietary supplements, vitamins, herbal medicine, minerals and anthroposophic medicines. Table 4 shows the results for phytotherapeutic and homeopathic in Colombia, compared to the global survey (vitamins are shown as a reference, since they belong to the conventional training of doctors).

In all countries, the level of knowledge of doctors varies greatly. In Colombia, knowledge about homeopathic products is higher than phytotherapy, as for Spain. In all other countries, the situation is the opposite.

Postures towards natural remedies and homeopathy in pediatric treatments

In Colombia, the total number of participating physicians was in accordance with the principles of comprehensive and complementary medicine (for example, holistic treatment approach, environmental influences), with higher rates for all claims than the global survey. For example, 94% of physicians agreed with the holistic treatment approach (83% in the global survey). With regard to the treatment of pediatric patients, almost all agreed that interaction with patients, empathy and dialogical skills play an important role (98%), and that nutrition, relaxation, motor activity, mental stability and the family environment are significant factors to prevent the onset or relapse of pediatric diseases (96%). On the other hand, 80% of pediatricians reported feeling comfortable discussing complementary forms of treatment with patients or their parents. Most doctors agreed that natural remedies improve recovery and relief of symptoms; They also associated this treatment option with a lower risk of side effects compared to conventional medications.

The main reasons to recommend natural remedies were good efficacy, few side effects, good long-term experience and the activation of the body’s resources for the healing process. On the contrary, the main limiting factor perceived for the use of natural remedies was the lack of information on therapeutic situations where they could be useful (65%). The failure of conventional medicine, the good efficacy and the activation of the organism’s resources were the most important reported benefits of homeopathy. Similar to natural remedies, the lack of education about the clinical conditions in which patients could benefit from homeopathic medicines (63%) and the lack of information about the mechanism of action (53%) were the main limiting factors with the homeopathic prescription.

There was great interest in the MCA by doctors: 71% said they were interested in learning more about VMS, 57% about homeopathy and 49% about homeopathy, herbal medicine, with higher percentages compared to the results of the global survey (47%, 42% and 47%, respectively).

In general, doctors expressed a strong motivation to use natural remedies in case they could learn more about some subjects. In the global survey, the most important topics of interest were: pediatric conditions that can be treated with natural remedies (74%), complementary use of natural remedies as an additional treatment (72%) and benefits of the efficacy of natural remedies in comparison with conventional medications (72%). Interest in these subjects was confirmed by the Colombian sample with higher rates (more than 80%).

Discussion

The results of the survey, both in the perspective of Colombia and in the global analysis of all countries, confirm the interest of doctors in the use of natural remedies and homeopathic medicines in children, as reported in research articles and studies. previous [12-16]. In the 12 months prior to the survey, 12.6% of pediatric recommendations in Colombia were based on homeopathy (15% in the global survey) and 8.6% were based on phytotherapy (17% in the global survey). The use of MCA in general (defined as VMS, phytotherapy and homeopathy) was 52% in Colombia and 57% in the global survey.

In comparison with the other countries participating in the present survey, Colombia and Spain were the only countries in which homeopathy was used more than phytotherapy. This finding is remarkable because Colombia represents approximately 10% of the world's biodiversity and medicinal plants have traditionally been used by their population for the treatment of diseases [17,18]. Although the use of medicinal plants is an integral part of the culture of Colombia, the data from this study indicate that, at least in children, the use of phytotherapy at present times is not so widespread and homeopathy has become more popular.

Homeopathic medicines were used as complementary treatment along with conventional/traditional medicines in 66% of children treated with homeopathy in Colombia. This result, in accordance with the global survey, is confirmed by the interest of physicians in receiving more information about the possibility of its use as an additional treatment (82% in Colombia, 72% in the global survey). On the other hand, more than 80% of the doctors declared that they would be more motivated to use natural remedies if they could prove a low interaction with conventional medicines and if they had more information about the doses for the use of natural remedies in order to avoid possible side effects (in the global survey, these rates were 54% and 66%, respectively).

The level of knowledge about natural remedies and homeopathy is variable, both within the same country and compared to other countries. This survey also confirms that knowledge about VMS, phytotherapy and homeopathy is different. In particular, the majority of physicians in Colombia (80%) reported a low level of knowledge about phytotherapeutics.

The lack of knowledge about the efficacy and the mechanism of action of natural remedies and homeopathic medicines remains a major obstacle to their prescription and/or recommendation. Therefore, it would be of great importance to have more information about the effectiveness of homeopathy. The mechanism of action of homeopathy based on diluted ingredients is still a subject of arduous discussion [19]. Theories about the possible explanation of the mechanism of action of homeopathy in the context of nanoinvestigation have recently been published [20] but are still under discussion.

In recent years, clinical studies devoted to better investigating the effectiveness of homeopathy and the results of homeopathic remedies compared to conventional treatments have multiplied: in particular, several studies on the treatment of acute respiratory infections have been carried out and earaches [21-24]. According to these data, the effectiveness of Homeopathic remedies were comparable to conventional treatments [21-24]; in some cases, the symptomatic improvement was faster in the patient treated with homeopathy, and there was a great difference in the requirements of antibiotics, in favor of homeopathy [23].

The most frequent pediatric conditions associated with the prescription/recommendation of natural remedies and homeopathy were upper respiratory tract infections and allergies, including atopic dermatitis. Other conditions treated with homeopathic remedies were recurrent infections, sleep disorders, acute abdominal problems, infant colic and behavioral problems.

Upper respiratory tract infections (RTIs) and common colds are the most frequent diseases in the world. They are self-limiting conditions, but their economic and social impact is considerable, especially in terms of lost work or school days [24,25]. The immune status of children in the first years of life makes them especially vulnerable to viral infections: in the literature there are about four to eight episodes of viral infection per year per child [24,26]. The ITRS are even the most frequent cause related to the prescription of antibiotics

in outpatient pediatric care. This represents a serious health problem in the world since the inadequate use of antibiotics has a strong impact on the increase of respiratory pathogens of bacterial origin [24,27,28]

The prevalence of functional gastrointestinal disorders (TGIF) in school-age children in Colombia is common, as reported by a recent study carried out in 373 children (average age of 9.9 years) in Colombia: the TGIF were diagnosed in Colombia. 39% of children and was more common in women. Functional constipation was the most common TGIF, and irritable bowel syndrome was the most common TGIF associated with abdominal pain [29].

57% of doctors expressed great interest in homeopathy and 49% in phytotherapy. The total number of doctors was in accordance with the principles of comprehensive and complementary medicine (for example, comprehensive treatment approaches, environmental influences, consider the use of all possible treatment options). For almost all subjects, the percentage of physicians who have requested more information was greater than 80%.

The postures and behavior of parents are important factors that motivate physicians to prescribe or recommend natural remedies for pediatric patients: in general, the doctors' recommendations were made frequently at the initiative of the parents as a result of their preferences or his concerns about the side effects of conventional drugs. These results confirm the trend revealed in recent studies [30,31].

Conclusions

The results of the survey showed that in Colombia there is a significant interest in CAM, although, in general, the use and knowledge of alternative therapies is in some way inferior to the other countries that participated in the survey.

It is worth highlighting the difference between homeopathic and phytotherapeutic remedies: Colombia is the only country in the survey, together with Spain, where there are more homeopathic prescriptions than herbal medicine.

The position of health professionals in Colombia seems positive towards the MCA, even though the level of knowledge is very fragmented. The need for more information has been revealed, always with percentages higher than 80%.

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