



AshaUSA in collaboration with the Minnesota Department of Health

Ayurvedic and Homeopathic Medicines usage among South Asians in Minnesota (AHMSAM)

A Research Report (2016)



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1. Executive Summary

This report presents findings from the *Ayurvedic & Homeopathic Medicine usage among South Asians in Minnesota study* (AHMSAM) including recommendations for policy, research, and practice to ensure the safe use of these alternative and complementary medicines.

1.1 Background

The South Asian population in Minnesota has more than doubled from 2000 (21,925) to 2010 (44,461). According to the 2010 Census, the South Asian population is the second largest Asian immigrant group in Minnesota with over 44,000 South Asians currently living in Minnesota (Council on Asian Pacific Minnesotans, 2012). The majority (89%) of the South Asians in Minnesota are of Indian origin (CAPM, 2012). The South Asian community is comprised of individuals with families of origin from India, Pakistan, Bangladesh, Bhutan, Nepal, and Sri Lanka as well as South Asians whose past generations originally settled in the Caribbean (Guyana, Jamaica, Suriname, Trinidad, and Tobago).

The use of alternative and complementary medicines such as Ayurveda and Homeopathy is quite common in the South Asian countries. However, there is very limited information or research as to the prevalence of these medicine usage in the South Asian community living in United States.

In the spring of 2015, MDH was notified of several cases of elevated blood lead levels among children who had taken Ayurvedic medications. The products used varied in appearance and composition, but all were purchased as Ayurvedic remedies. Case reports from other states have indicated that high lead content may be a widespread problem in Ayurvedic medications.

With an understanding that Ayurvedic and Homeopathic medicines are commonly being used in the South Asian countries, the growth of the South Asian population in Minnesota, and the recent incidents identified by Minnesota Department of Health (MDH), AshaUSA in collaboration with MDH decided to gain a better understanding of the usage of these alternative and complementary medicines within the South Asian community living in Minnesota.

Based on the survey results, the goal is to increase the awareness about the usage of these medicines with the health care providers to ensure that these are taken into consideration during doctor/patient interactions. The research will also help identify the prevalence of alternative and complementary medicine usage, the reasons for not sharing the information with the healthcare providers, the source of information for these medicines and from where these medicines are purchased. It is important to know as to where these medicines are purchased since the FDA currently does not review Ayurvedic and Homeopathic medicines for safety and effectiveness.

1.2 Definition of Ayurveda and Homeopathy

Ayurvedic medicine (also called Ayurveda) is one of the world’s oldest medical systems. It originated in India and has evolved there over thousands of years. In the United States, Ayurvedic medicine is considered a complementary health approach. According to National Center for Complementary and Integrative health (NCCIH, 2015) many products and practices used in Ayurvedic medicine are also used on their own as complementary approaches—for example, herbs, massage, and specialized diets. The alternative medical system of Homeopathy was developed in Germany at the end of the 18th century. Supporters of Homeopathy point to two unconventional theories: “like cures like”—the notion that a disease can be cured by a substance that produces similar symptoms in healthy people; and “law of minimum dose”—the notion that the *lower* the dose of the medication, the *greater* its effectiveness. Many Homeopathic remedies are so diluted that no molecules of the original substance remain (NCCIH, 2015).

1.3 Methodology

The AshaUSA research team partnered with the Refugee and International Health Unit at MDH to conduct the survey on the usage of Ayurvedic and Homeopathic medicines within the South Asian community living in Minnesota. This collaboration led to the development of Project AHMSAM (Ayurvedic and Homeopathic Medicines usage among South Asians in Minnesota) to gain a better understanding of the prevalence of alternative and complementary medicine usage, primary care physicians awareness of the use of these medicines, the source of information for these medicines and where these medicines are purchased.

The study recruited 278 self-identified Minnesota South Asian adults (18 years or older) to participate in a paper-based or online survey. The Minnesota Department of Health’s approved this study. The survey gathered information on (1) health status, (2) Ayurvedic medicine usage, (3) Homeopathic medicine usage, and (4) demographic information. The survey did not collect any personally identifiable information (i.e., name, birth date, SSN, address, etc.).

The survey participants included various ages (ranging from 18 years plus), education levels (ranging from less than high school to postgraduate degree), and income levels (ranging from \$25,000 to over \$250,000). Various techniques and approaches to data collection were implemented to ensure broad community participation.

1.4 Key Findings

(Please note that “n” for each finding was different since not all questions were required).

1. Based on the survey results, the use of Ayurvedic and Homeopathic medicines is quite prevalent in the South Asian community in MN.
 - 39% of the participants (n= 272) indicated that they use Ayurvedic medicines while 42% of the participants (n=260) indicated that they use Homeopathic medicines.
 - 23% of the participants indicated that they use Ayurvedic medicines for their kids, ages 18 and under (n = 117) and 23% of the participants indicated that they use Homeopathic medicines for their kids ages 18 and under (n= 100).

2. The participants who use either these Homeopathic or Ayurvedic medicines seem to incorporate them as a part of their lifestyle and seem to use them for a number of years.
 - 57% of the participants (n= 70) indicated that they have used Ayurvedic medicines for more than 5 years and 62% of the participants (n= 89) indicated that they use or have used Homeopathic medicines for at least 5 years or less.

3. The participants who use either these Homeopathic or Ayurvedic medicines seem to use these medicines for common ailments such as cold, acidity, cough etc.
 - As needed basis:
 - i. Ayurvedic medicines used on as per need basis by adults were mainly for common ailments such as cough (58%), cold (57%), aches and pains (50%), indigestion (43%) acidity (41%), , and constipation (41%).
 - ii. Homeopathic medicines used on an as per need basis by adults were mainly for common ailments such as cold (49%), cough (40%), aches and pains (38%), acidity (19%), constipation (19%), and indigestion (18%).
 - Regularly:
 - i. Ayurvedic medicines used regularly by adults were also mainly for common ailments and external use such as hair care (16%), cold (15%), allergies (8%), and skin care (8%).
 - ii. Homeopathic medicines used regularly by adults were also mainly for common ailments such as cold (13%), cough (10%) and allergies (9%).

4. More than 50% of the participants who used either Ayurvedic or Homeopathic medicines used sources other than an Ayurvedic or Homeopathic doctor. Participants also depended on family & friends to give them advice, which is very common in South Asian culture.

5. Over 40% of the survey participants who indicated that they used Ayurvedic or homeopathic medicines did not share this information with their primary care doctor because they did not see a need, or they did not know how to explain, or they felt that the doctors wouldn't understand.

1.5 Conclusion and Recommendations

The AHMSAM survey is the first step in understanding the prevalence of Ayurvedic and Homeopathic medicine usage in the South Asian community living in Minnesota. The results from this study have helped us gain a better understanding of the prevalence of alternative and complementary medicine usage, the source of information for these medicines and where these medicines are purchased, ailments for which these are commonly used and the reluctance of South Asians in Minnesota to share the information with their primary care providers. Based on the findings from this research, AshaUSA and the Refugee and International Health Unit at MDH will work with the community to create awareness and implement various programs to ensure safe use of these medicines. This report will also be distributed widely to health care providers and legislators to increase their awareness of the use of Ayurvedic and Homeopathic medicines in the South Asian community and start a dialogue about the use of these medicines in a culturally competent way.

The following section includes some key recommendations based on the results of the AHMSAM survey.

a) For the South Asian Community:

1. Be careful as to where you purchase your Ayurvedic or Homeopathic products.

- Make sure that it is manufactured by a reputable company. FDA does not evaluate Ayurvedic or Homeopathic medicines for safety, quality, and effectiveness. This also applies to buying products on the internet. FDA urges consumers to beware of unregulated internet drug sellers.
- Many people believe that products labeled "natural" are always safe and good for them. This is not necessarily true. Herbal medicines do not have to go through the testing that drugs do.
- Although people sometimes assume that all Homeopathic remedies are highly diluted and therefore unlikely to cause harm, some products labeled as Homeopathic can contain substantial amounts of active ingredients and therefore could cause side effects and drug interactions.
- If you are thinking about using an herbal medicine, first get information on it from reliable sources.

2. Before you purchase review the ingredients and the expiration date.

- AHMSAM research team found some Ayurvedic medicines on the stores shelves which had expired.
- Understand the ingredients of any herbal medicines you take, and make certain you can trust that the product does not contain lead, arsenic or mercury.
- Certain populations, including children, are particularly at risk for the toxic effects of heavy metals.

3. *Tell your healthcare professional about all alternative products.*

- Some herbs, minerals, and metals can interact with each other and with conventional medications.
- Show your health care provider any medicines you are taking including the labels.
- Do not use Ayurvedic or Homeopathic medicines to replace conventional care or to postpone seeing a healthcare provider about a medical problem.
- Women who are pregnant or nursing, or people who are thinking of using Ayurvedic or Homeopathic approaches to treat a child, should consult their (or their child's) health care provider.
- Tell all your health care providers about any complementary and integrative health approaches you use. Give them a full picture of what you do to manage your health. This will help to ensure coordinated and safe care.

4. *If you have symptoms that concern you, contact:*

- The poison center (800-222-1222), or a medical toxicologist or your health care provider

b) For Health Care Providers

1. The medical professionals should gain an understanding of Homeopathic and Ayurvedic medicines so that they can ask questions on the use of these medicines with their patients from a position of understanding.
2. When the medical professionals are treating South Asian community members, they should specifically ask if they are using any alternative or complementary medicines such as Ayurveda or Homeopathy. If they are using them, encourage them to show medicines including the labels. Don't just ask for "other medications taken" because some communities only consider western medications as "medicine."

c) For the Minnesota Department of Health

1. MDH should periodically review "import alerts" by FDA on brand-specific Indian spices (which are extensively used within the SA community), Ayurvedic and Homeopathic medicines and alert the local stores (natural and South Asian Grocery stores).
2. The demographics within Minnesota have changed a lot since 2000. The population continues to grow more diverse, includes many growing foreign-born communities. Most of them are first generation immigrants that tend to bring habits and beliefs about the alternative medicines from their country of origin, as it was clearly noted by the Asian Indian populations' use of Ayurveda and Homeopathy. MDH should develop material on complementary and alternative medicines used by different ethnic communities represented in Minnesota and widely distribute it to the health care professionals. It is important that the health care professionals get a general understanding of different complementary and alternative medicines used in the general population living in Minnesota.

d) For the Policymakers

- The Electronic Health Records should include questions related to complementary and alternative medicines as part of the patient's profile.
- The medical education should include information about complementary and alternative medicines used by the community at large within United States

1.6 Next Steps

1. Develop culturally competent training materials for health care providers that includes content specific to these complementary medicines when working with the South Asian population.
2. Partner with public health organizations and policy organizations to establish resources for research and education to increase awareness about the use of Ayurvedic and Homeopathic medicines in the South Asian population.
3. MDH will continue to work collaboratively to finish educational materials and broad dissemination to temples, community-based organizations (CBOs), and pediatric offices.
4. MDH will create a webpage devoted to this work and messaging to those who use Ayurvedic medications.
5. MDH will meet with local public health partners to increase awareness of potential risks and recommendations in treating South Asian children.
6. AshaUSA will leverage social media and website to share key findings and recommendations from AHMSAM report with the South Asian community and health care providers.
7. AshaUSA will develop materials to provide an overview of Ayurvedic and Homeopathic medicines for the health care professionals which can be downloaded from the website.

2. Introduction

The **Ayurvedic and Homeopathic Medicines usage among South Asians in Minnesota** (AHMSAM) study was conducted in 2015 by AshaUSA (www.ashausa.org) in partnership with the Refugee and International Health Program at the Minnesota Department of Health (MDH), St. Paul in order to understand the prevalence and use of Homeopathy and Ayurvedic medicine by the South Asian community in Minnesota.

AshaUSA (Asha means hope) is a non-profit organization in Minnesota focused on creating healthy, happy, and harmonious South Asian communities by engaging and empowering South Asian women, men, and children through culturally specific programs and services.

Between 2000 and 2010, the South Asian population in the US grew by about 81% nationally (2010 Census). The South Asian community in the United States includes individuals from different national origins, namely Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka. Asian Indians are, by far, the largest South Asian group living in the United States followed by Pakistanis, Bangladeshis, Nepalis, Sri Lankans, Bhutanese, and Maldivians (SAALT & AAF, 2012).

Given the growth of the South Asian population in the United States, it is important to have a better understanding of Complementary and Alternative medicine (CAM) usage such as Ayurveda and Homeopathy among this population so as to educate healthcare providers to be culturally sensitive to the specific needs of this ethnic group. In addition, healthcare providers can help us better understand any potential interactions between pharmaceuticals and supplements commonly used by these individuals (Misra et al.2010). Hence, the purpose of this research study is to determine prevalence and use of Homeopathic and Ayurvedic medicines by South Asians living in Minnesota.

2.1 Characteristics of the South Asian population in Twin Cities, MN

The Asian population in Minnesota makes up approximately 4% of the total state population. The largest South Asian group in Minnesota is of Asian Indian descent and makes up approximately 15% of the total Asian population (Kao, 2012). The other South Asian communities living in Minnesota immigrated from Sri Lanka, Pakistan, Nepal, Bangladesh, and Bhutan. Most of Minnesota's Asian populations live in the metro areas of Minneapolis and St Paul, but there are sizeable numbers living in suburban areas as well. While 42% of the overall Asian population in Minnesota earned a Bachelor's degree, there is a wide range of education among the ethnicities. In Minnesota more than 55% of Indian, Pakistanis, and Sri Lankans hold a Bachelor's degree, while 47% of Bangladeshis earned a Bachelor's degree (Kao, 2012). Among the South Asians living in Minnesota, 23% of Pakistanis and Bangladeshis lack health insurance and 12% of Indians are uninsured (Kao, 2012).Poverty rates were highest among Bangladeshis at around 20%, followed by Pakistanis (15%), Sri Lankans (9%), and Indians (8%) (Kao, 2012).

2.2 What are Ayurveda and Homeopathy?

According to *National Center for Complementary and Integrative Health* (NCCIH, 2015) more than 30 percent of adults and about 12 percent of children use some form of health care approaches developed outside of mainstream Western, or conventional, medicine. If a non-mainstream practice is used together

with conventional medicine, it's considered "complementary." If a non-mainstream practice is used in place of conventional medicine, it's considered "alternative."

Homeopathy is a type of complementary therapy which might be taken side by side with allopathic medicine (Cassileth, 1999). On the other hand Ayurveda is a type of alternative medicine based on the exclusion of allopathic medicine, replacing it with ancient Indian herbal remedies (Cassileth, 2000). However, according to NCCIH (2015) true alternative medicine is uncommon. Most people who use non-mainstream approaches use them along with conventional treatments.

Ayurveda is an ancient health care tradition that has been practiced in India for at least 5,000 years. The word comes from the Sanskrit terms *ayur* (life) and *veda* (knowledge) (Lallanilla, 2015). Ayurveda has evolved over the years and is now integrated with other traditional practices, including yoga. Ayurvedic medicine is entirely holistic. Its adherents strive to create harmony between the body, mind, and spirit, maintaining that this balance prevents illness, treats acute conditions, and contributes to a long and healthy life (Guha, 2015). According to University of Minnesota's Center for Healing and Spirituality, Ayurveda is widely practiced on the Indian subcontinent and more than 90 percent of Indians use some form of Ayurvedic medicine.

According to WebMD (2014) Homeopathy is a medical philosophy and practice based on the idea that the body has the ability to heal itself. Homeopathic medicine views symptoms of illness as normal responses of the body as it attempts to regain health. Homeopathy is based on the idea that "like cures like." That is, if a substance causes a symptom in a healthy person, giving the person a very small amount of the same substance may cure the illness.

In 1900 Homeopathy was very popular in the US with over 20 Homeopathy schools and 100 Homeopathic hospitals and over 1000 Homeopathic pharmacies (Ullman, 1988). However, currently Homeopathy in America is lagging behind other countries of the world. However, we can all expect a tremendous resurgence of its use and healing properties, especially as immigrants come to this country from places where Homeopathy is very popular, one such place being India. Homeopathy is very popular in India and presently, there are over 100,000 Homeopathic doctors and over 100 four- and five-year Homeopathic medical colleges in India (Ullman, 2015).

2.3 Background on Homeopathic and Ayurvedic medicines used by South Asians living in the United States

The degree to which Homeopathy and Ayurveda is used by South Asians is a function of both the cultural and social background of the South Asian patients, and the nature of their ailments. Patients with medical conditions that cannot be treated with confidence by allopathic medicines are perhaps more likely to resort to non-allopathic treatments (Ali-Hussain-Gambles, 2005)

A recent study in the United States found that some ethnic groups, for example African Americans and Hispanics, were less likely to avail themselves of complementary and alternative medicines (CAM) than

the majority white population group, while Asian Americans (American citizens of East Asian heritage) were more or less as likely as the white population to use them (Keith et al, 2005).

A few studies have addressed CAM use in Asian Americans. Mehta et al. (2007) reported that Asian Indians had the lowest use (19%) of herbal medicine (biologically based therapies) as compared to Chinese Americans (32%).

Hsiao et al (2006) reported a significantly higher CAM use over the past 12 months among Asian Americans (75%), with highest use in Chinese Americans (86%) and lowest use in South Asians at 67%. However, Asian Americans were less likely than whites to disclose CAM/herbal use to their primary physician/conventional health care practitioner (Misra et al.2010).

The current understanding of complementary and alternative medicine (CAM) use among Asian Americans does not adequately explore patterns and use or health education needs of Asian Indians (Misra et al, 2010). Current national surveys have not assessed CAM use and its association with health behaviors, beliefs, and possible gender differences in specific Asian subpopulations due to small sample sizes or because multiple ethnic groups are aggregated into the general category of “Asian Americans”.

It is important to note that CAM may not be used exclusively, and that South Asian patients may be mixing and matching allopathic treatment with complementary medicines and thus putting themselves at risk (DeAngelis, 2003). A common myth about CAM medicines and preparations is that they are inherently safe, but CAM products containing powerful pharmacologically active substances can be toxic either alone or in combination with other medication (Begbie et al, 1996). Studies have shown Ayurvedic medications with prevalence of heavy metals and lead toxicity in adult patients of South Asian origin (Pierce, M. et.al. , 2012; Raviraja, Vishal Babu, Sehgal , 2010; Saper, Kales, Paquin, Burns, Eisenberg, Davis, Phillips, 2004) and Homeopathic drugs causing toxicity and even death in some patients (Posadski, Alotaibi , Ernst , 2012).The major danger comes from herbal medications, some of which can cause severe life threatening toxicity; for example, garlic can prolong bleeding time (DeAngelis, 2003). Many common herbal substances can interact with Western pharmaceutical products.

In 2007, Mehta et al found that there are important ethnic variations in use of CAM, in that, Asian Americans are less likely to disclose their use to conventional healthcare providers, suggesting that it is particularly important that physicians query Asian American patients about CAM use.

There is a paucity of data concerning the safety of CAM therapies (Ernst and Fugh-Berman, 1999) and it is therefore important to discover the prevalence of CAM use and the extent to which it is used along with allopathic remedies (Ali-Hussain-Gambles, 2005)

3. Rationale for the study

In the spring of 2015, MDH was notified of several cases of elevated blood lead levels among children who had taken Ayurvedic medications. The products used were varied in appearance and composition, but all were purchased as Ayurvedic remedies.

Examples of Products Found to Contain Heavy Metals, including Lead (2015)



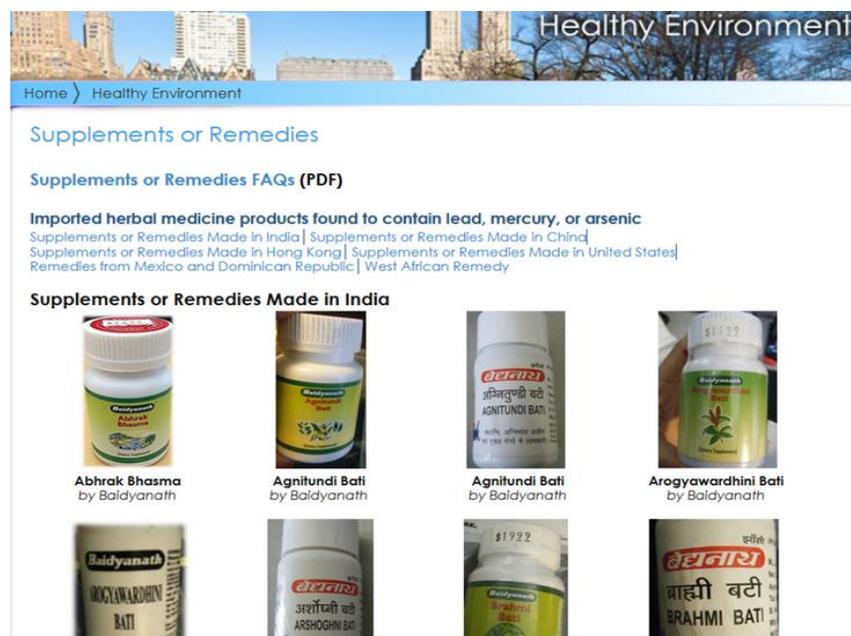
Gripe Water



Eczema Treatment

Case reports from other states have indicated that lead may be a widespread problem in Ayurvedic medications. The New York City Department of Health has done a great deal of work in identifying some products with high lead or mercury content and removing them from local stores. Their website shows some of those products they have identified:

<http://www.nyc.gov/html/doh/html/environmental/lead-remedies.shtml#india>



Screenshot of NYC Public Health's page on South Asian medicines found to contain various metals

In the cases seen in MN, local public health departments reported having difficulty in asking about Ayurvedic medications in a way that the families understood what they were asking. In some cases, families didn't immediately identify any Ayurvedic medicines on their list of medications being taken, but thought of it later.

MDH reached out to South Asian community organizations and leaders, including AshaUSA, and requested assistance from the collaborative in learning more about Ayurvedic medicine use in the South Asian community and how to best communicate with those groups about lead & heavy metal hazards. The collaborative recognized the high level of trust many in the South Asian community have in Ayurvedic practices, and did not want to discount the variety of benefits of Ayurveda while responding to the elevated lead cases.

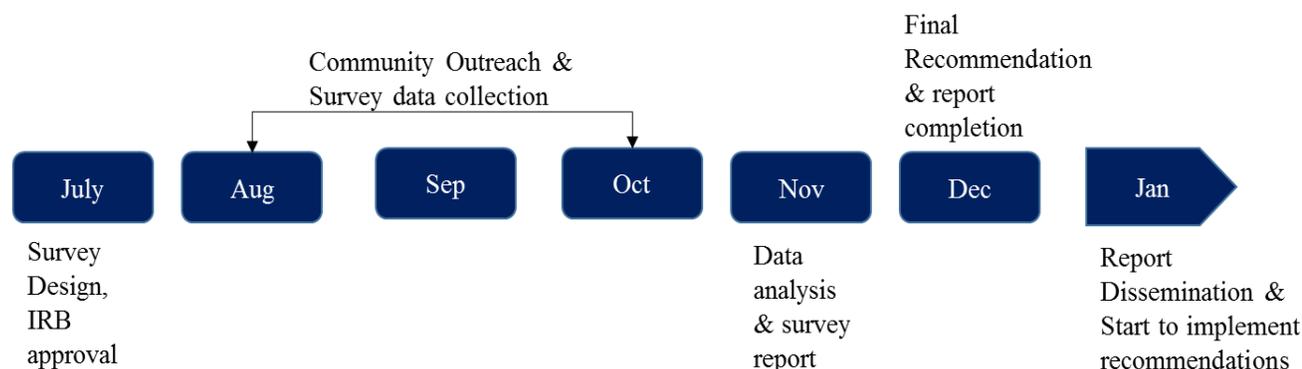
AshaUSA invited the MDH Refugee and International Health program to collaborate on efforts to better understand Ayurvedic medicine use in MN among South Asians. In general, there has been very little reporting on the use of Ayurvedic medicines among South Asians. AshaUSA proposed conducting a community-wide survey, collecting the input and feedback received from Ayurvedic practitioners, and examining the variety of medicines available at South Asian grocery stores. The project partners recognized the gap in understanding & knowledge of Ayurvedic medicinal practices, and identified a variety of stakeholders that could benefit from the knowledge gained by the planned activities.

4. Research Approach

4.1 Research Methods and Design

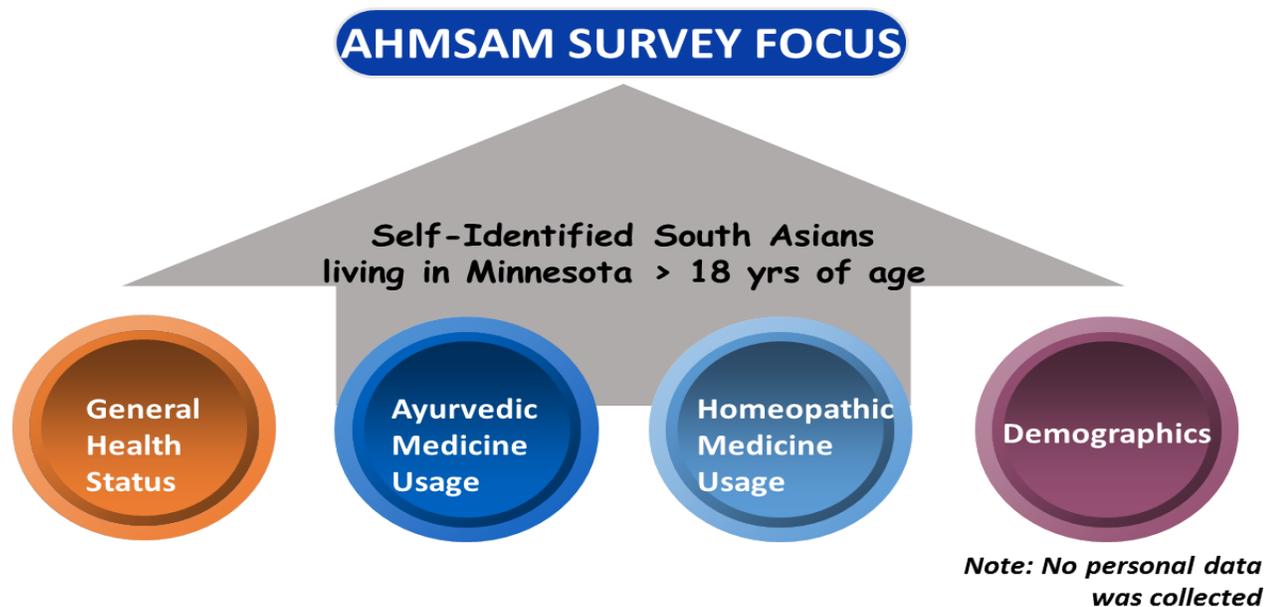
It was decided that a survey would be the appropriate methodology for data collection to gain a baseline understanding of the prevalence of Ayurvedic and Homeopathic medicine usage in the South Asian community in Minnesota. The AshaUSA research team along with Refugee and International Health Unit at MDH developed the survey instrument. The MDH obtained approval for this study from the MDH Institutional Review Board.

4.2 AHMSAM Timeline



4.3 Research Instrument

The survey consisted of 48 questions divided into four sections: health status, Ayurvedic medicine use, Homeopathic medicine use, and demographics. (See a sample copy of the instrument in the Appendix) Eligible participants were South Asian individuals of 18 years of age and older residing in Minnesota. Data were collected from July 2015 through November 2015. The survey was distributed through two methods: online survey administration using Survey Monkey and paper-based surveys. General Health Status section focused on general physical health status and chronic health issues. The Ayurvedic Medicine usage section focused on whether they use Ayurvedic medicine, how often and how long, for what ailments, where do they get the medicines from, if they see an Ayurvedic practitioner, do they tell their primary care physician about the alternative medicines they are using, if they use Ayurveda for their children and for what ailments. Homeopathic Medicine usage section focused on the same set of questions as they related to Homeopathy. Demographic information section included questions about gender, age, country of origin, immigration status, and length of stay in the U.S., dietary restrictions, zip code, and level of education, income, employment status, and religious affiliation.



4.4 Research Sample

This study used a snowball sampling design, which is a non-probability, convenience sampling technique where existing study subjects recruit future subjects from among their acquaintances. As the sample builds up, enough data are gathered to be useful for research. This sampling technique is often used in hidden populations, such as the South Asian community in Minnesota, which are difficult for researchers to access. The survey was open from July 25, 2015 to November 4, 2015. The sample size of 278 is based on the number of surveys collected in this time period.

The participants included South Asian men and women living in Minnesota aged 18 years and older from various income levels, education levels, and social economic status.

4.5 Methods of data Collection

The data collection effort was led by the Research Team from AshaUSA and the Research Associate from MDH, along with one graduate student from University of Minnesota, School of Public Health and one undergraduate student from Muhlenberg College.

A total of 278 completed surveys were collected from the South Asian community. Data were collected using a modified snowball sampling method. Our goal was to collect 250 surveys.

AshaUSA has a large reach within the South Asian community and reached out to its community members. Researchers targeted community events that drew large populations of South Asians. Additionally, online searches were conducted to locate local South Asian community events and gatherings. Once researchers reached out to organizations and groups of people, they were referred to additional organizations and groups of people who were then contacted to see if they could distribute the survey.

Various techniques and approaches were implemented to ensure broad community participation. Reaching the community through social events and religious centers helped the research team reach the broader population with different education levels and social status.

- Community outreach at various social events: The research team attended India Fest, an event organized by Indian Association of Minnesota on August 15th 2015 at St. Paul Capitol Grounds. The team was able to administer paper surveys as well as increase awareness of the concerns for lead and other metals in Ayurvedic medicines. The community members were also encouraged to complete paper surveys at religious centers such as Hindu Mandir.
- Cultural, professional, and religious organizations member listserv: Through their listservs, South Asian social and cultural organizations and University of Minnesota South Asian Student Association encouraged their members to participate in the online AHMSAM survey. The members were reminded multiple times in order to encourage participation. The religious leaders played an important role in educating their members in terms of importance of participating in the survey and encouraged them to participate.
- Friends and contacts of the research team were encouraged via email to participate in the survey.

4.6 Methods of Data Analysis

Online data were entered electronically through Survey Monkey. The two MDH research assistants entered the paper and pen survey data manually. Descriptive statistics were run to locate data entry errors. Data analysis was performed by the team using the Tableau Version 9.2 Visualization Package. Descriptive statistics and cross tabulations were run to gain a better understanding of the prevalence and use of Ayurvedic and Homeopathic medicines in the South Asian community. As the data were being analyzed, additional analyses were conducted based on questions that emerged during preliminary analyses.

4.7 Limitations of the Study Design

The sampling method used for this study was effective in getting to the target population because there was no systematic way of locating the members of the South Asian community in Minnesota. By contacting participants through social and religious organizations, the researchers were able to gain the trust of the community members so they were comfortable enough to participate in a survey that asked for personal health information. In social sciences research it is sometimes beyond the researcher's ability to recruit a randomly selected representative sample and snowball method might be inevitable. One needs to take the results of this study keeping in mind that there is no way to know if the sample reached was actually representative of the true South Asian population in MN.

Another limitation is that due to the data being collected via survey, all of the statistics presented are based on self-report data, i.e., the self-report of using certain type of Homeopathic or Ayurvedic medicine to treat certain ailments could not be confirmed using medical records, which means the actual rates of use of Ayurvedic and Homeopathic medicines in MN South Asian population may be over- or under-reported by the AHMSAM survey respondents. Also, the survey was provided only in English, thus leaving out possibility of including South Asians with no or limited English proficiency.

4.8 Demographics of the survey participants:

The table below depicts the demographic information of the survey participants.

Variable	Number	Percentage
GENDER n=241		
Female	132	54.80%
Male	107	44.40%
Other	2	0.80%
AGE GROUP n=243		
18-25	13	5.30%
26-30	29	12.00%
31-40	79	32.50%
41-50	62	25.50%
51-60	28	11.50%
61-70	20	8.20%
70+	12	5.00%
NUMBER OF YEARS IN U.S. n=246		
Visiting	3	1.20%
0-5 years	38	15.50%
6-10 years	34	13.80%
11-15 years	44	17.90%
16-30 years	74	30.10%
30+ years	53	21.50%
EDUCATION LEVEL n=246		
High School or GED	6	2.40%
Associates Degree	4	1.60%
Bachelors Degree	59	24.00%
Graduate Degree	171	69.60%
Prefer not to answer	6	2.40%

Variable	Number	Percentage
RELIGIOUS AFFILIATION n=243		
Agnostic	9	3.70%
Atheist	4	1.60%
Buddhist	6	2.50%
Christian	8	3.30%
Hindu	174	71.60%
Jain	5	2.10%
Muslim	17	7.00%
Sikh	1	0.40%
Other	5	2.10%
Prefer not to answer	14	5.70%
COUNTRY OF ORIGIN n=248		
Bangladesh	8	3.20%
Bhutan	1	0.40%
India	218	88.00%
Nepal	6	2.40%
Pakistan	4	1.60%
Sri Lanka	10	4.00%
Other	1	0.40%
DIETARY RESTRICTIONS n=251*		
None	117	
Gluten-free	3	
Halal foods only	13	
Lactose-free	5	
Vegan	4	
Vegetarian	109	

* Participants had the choice of “select all that apply”.
Actual number of participants may vary.

5. Data Analysis

5.1 Research Questions

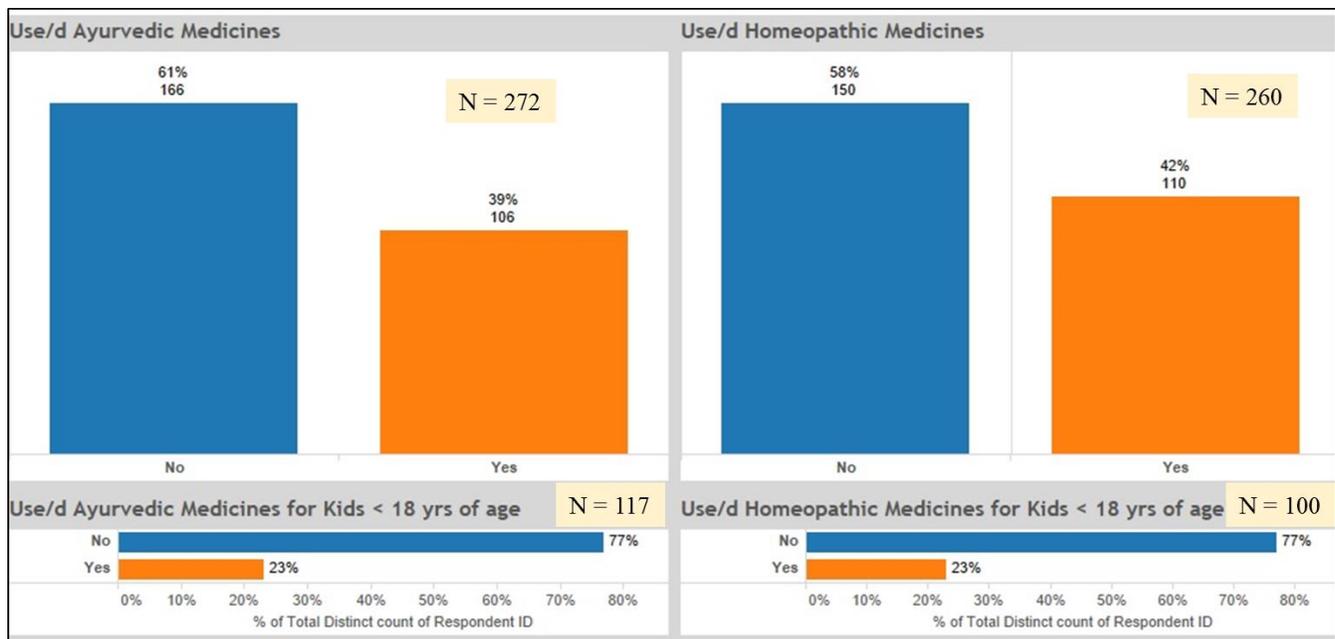
The research questions for this study were:

- What percentages of participants use Ayurvedic or Homeopathic medicines? How many of those also use it for their children?
- How long have the participants been using Ayurvedic or Homeopathic medicines?
- What are the common ailments for which the Ayurvedic or Homeopathic medicines are used?
- Where do the participants get information about the Ayurvedic or Homeopathic medicines?
- Where do the participants purchase Ayurvedic or Homeopathic medicines?
- Do participants who use Ayurvedic or Homeopathic medicines share the information about the use of these medicines with their primary care doctor? What are some of the primary reasons for not sharing the information?
- Is there a correlation between the use of Ayurvedic or Homeopathic medicines by age, gender, income, religion, education, number of years in the US, etc?

5.2 Research Questions and Key Findings

5.2.1 What is the percentage of participants who use either Ayurvedic or Homeopathic medicines? How many of those also use it for their children?

Use of Ayurvedic & Homeopathic Medicines by South Asians in Minnesota (Figure 1)



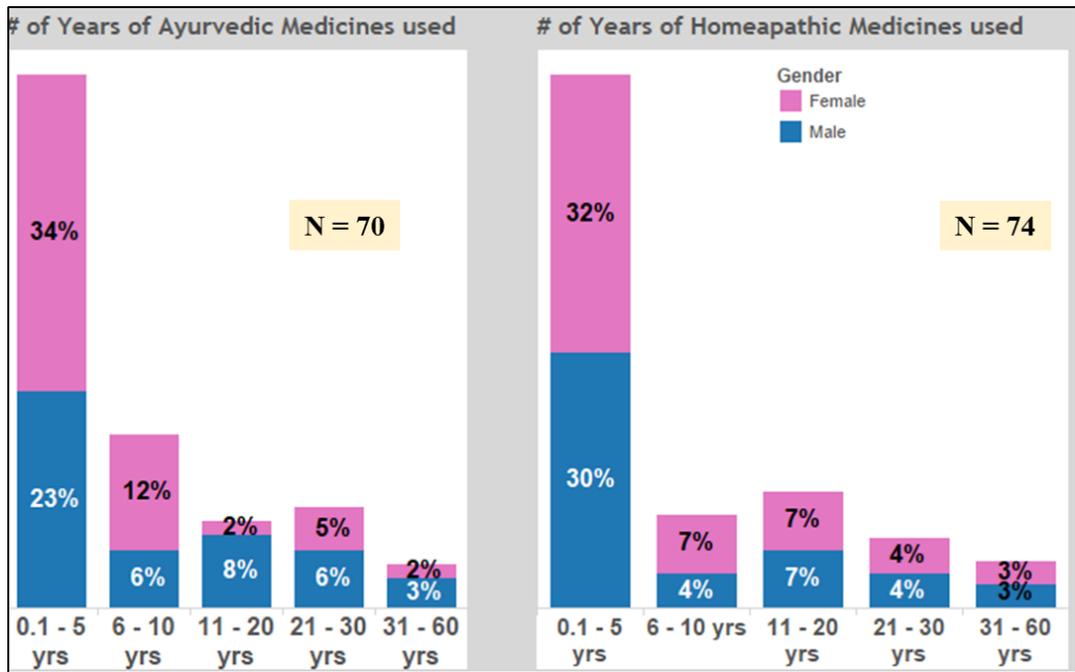
- 39% of the participants use Ayurvedic medicines (n= 272) and 42% of the participants use Homeopathic medicines (n=260).
- 23% of the participants use Ayurvedic medicines for their kids, ages 18 and under (n= 117) and 23% of the participants use Homeopathic medicines for their kids, ages 18 and under (n= 100).

Key Takeaway:

Based on the survey results, the use of Ayurvedic and Homeopathic medicines is quite prevalent in the South Asian community in MN.

5.2.2 How long have the participants been using Ayurvedic or Homeopathic medicines?

Number of years Ayurvedic / Homeopathic Medicines used by South Asians in Minnesota by gender (figure 2)



57% of the participants (34% women, 23% men) have used Ayurvedic medicines for 5 years or less and 62% of the participants (32% female, 30% male) have used Homeopathic medicines for 5 years or less.

5.2.3 What are the common ailments for which the Ayurvedic or Homeopathic medicines are used?

Ailments for which the Ayurvedic (n=87) and Homeopathic (n=94) medicines are used for

- Ayurvedic medicines used on an as needed basis by adults were mainly for common ailments such as cough (58%), cold (57%), aches and pains (50%), indigestion (43%), acidity (41%), and constipation (41%).
- Ayurvedic medicines used regularly by adults were mainly for common ailments and external use such as hair care (16%), cold (15%), skin care (8%) and allergies (8%).
- Homeopathic medicines used on an as needed basis by adults were mainly for common ailments such as cold (49%), cough (40%), aches and pains (38%), acidity (19%), constipation (19%), and indigestion (18%).
- Homeopathic medicines used regularly by adults were also mainly for common ailments such as cold (13%), cough (10%) and allergies (9%).

5.2.4 Where do the participants get information about the Ayurvedic or Homeopathic medicines?

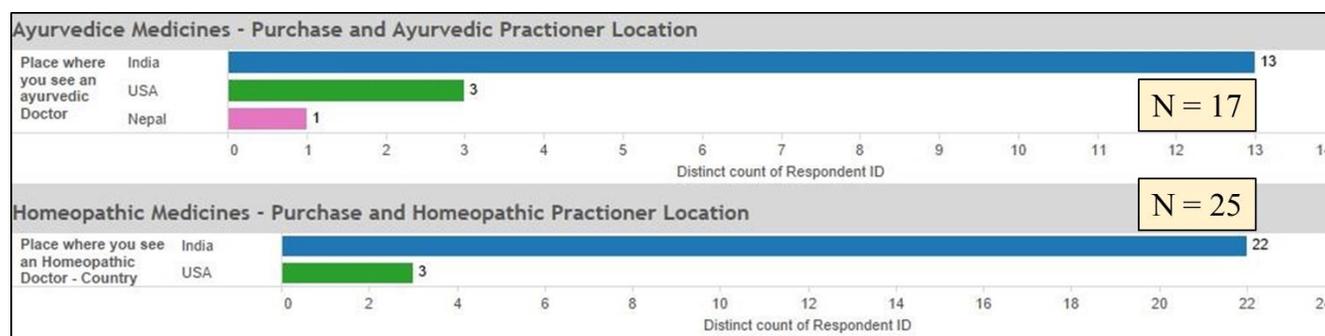
Source of information for Ayurvedic & Homeopathic medicines (figure 5)*



* Participants could "select all that apply" for the question above regarding "source of information". Actual number of participants may vary.

5.2.5 Where do they purchase Ayurvedic or Homeopathic medicines?

Of the participants who have seen an Ayurvedic or Homeopathic doctor, which country did they see the doctor in and which country do they get the medicines from?(figure 6)

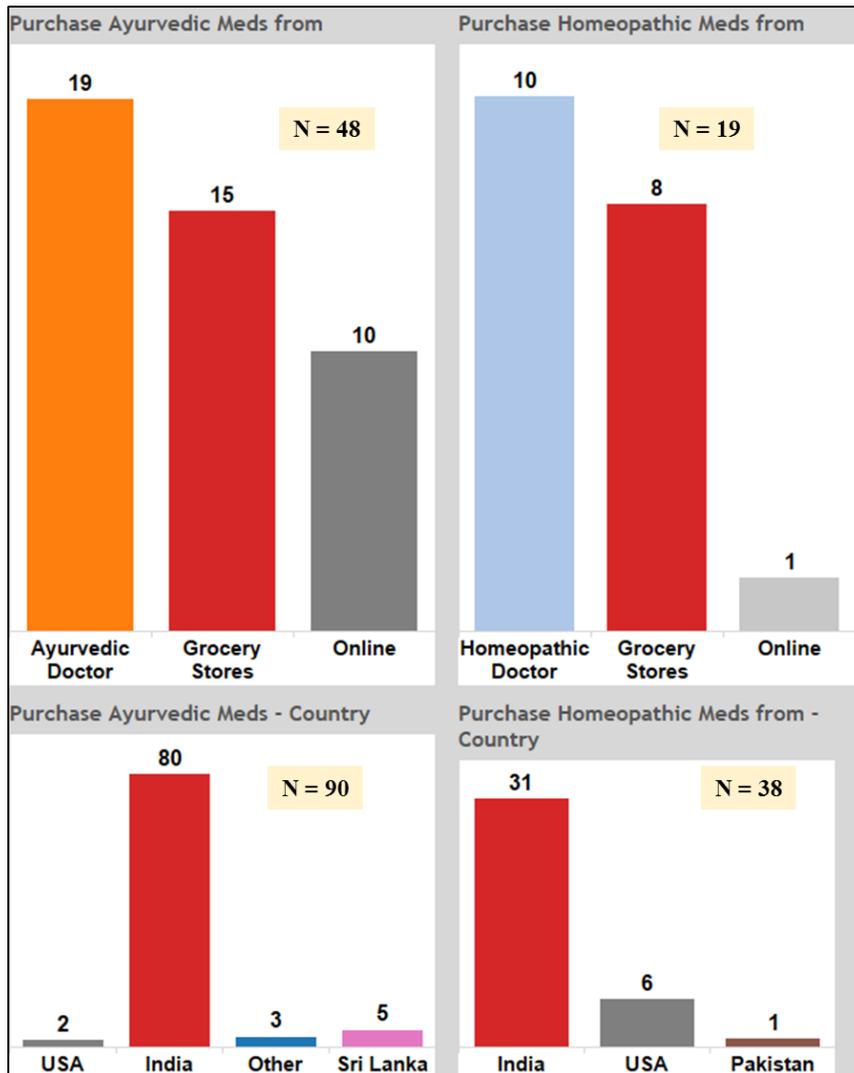


- Of the survey participants who have seen an Ayurvedic doctor, 81% of them saw the Ayurvedic doctor in India (n=17).
- Of the survey participants who have seen a Homeopathic doctor, 88% of them saw the Homeopathic doctor in India (n=25).

Key Takeaway:

Of the participants who saw the Ayurvedic or Homeopathic doctor, majority of them saw their doctor in their country of origin. This may be because they are familiar with the system / doctors from their country of origin and may not seek a doctor in the United States.

5.2.6 Where do the participants purchase Ayurvedic or Homeopathic medicines? (Figure 7)



Ayurvedic Medicines:

- Of the survey participants who use Ayurvedic medicines, 40% of them purchased products from the Ayurvedic doctor, 27% of them purchased from local South Asian grocery stores, and 21% from online stores (n=48)
- Of the survey participants who use Ayurvedic medicines, 89% of them purchase Ayurvedic medicines from India (n=90).

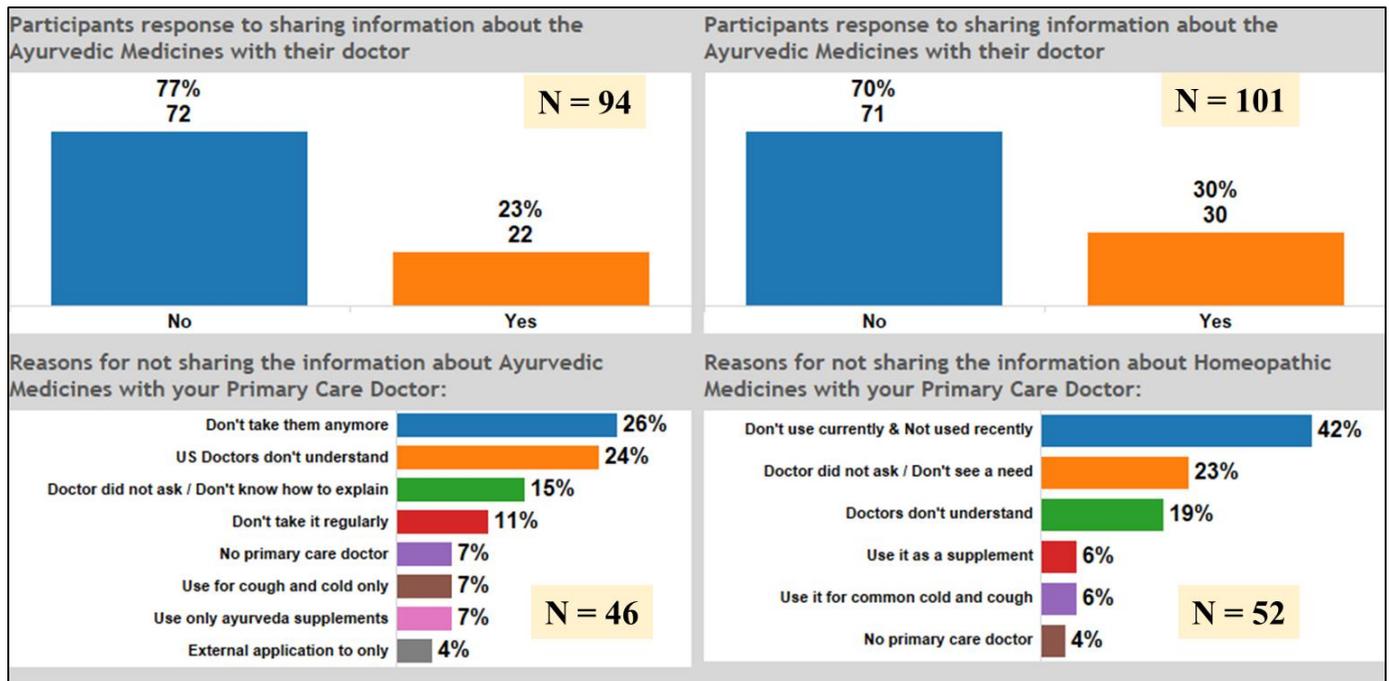
Homeopathic Medicines:

- Of the survey participants who use Homeopathic medicines, 52% of them purchased products from the Homeopathic doctor, and 21% from local South Asian Grocery stores (n=19).
- Of the survey participants who use Homeopathic medicine, 82% of them purchase Homeopathic medicines from India (n=38).

Key Takeaway:

Majority of the Ayurvedic and Homeopathic medicines are purchased either in India or from an Ayurvedic or Homeopathic doctor.

5.2.7 Do participants who use Ayurvedic or Homeopathic medicines share the information about the use of these alternative medicines with their primary care doctor? What are some of the main reasons for not sharing the information? (Figure 8)



Ayurvedic Medicines:

Of the 94 the participants who use Ayurvedic medicines, only 23% of them share the information about these medicines with their primary care doctor. Refer to figure 8 above for the reasons for not sharing information with their primary care doctor.

Reasons given for not sharing were:

- US Doctors don't understand (24%)
- Doctors did not ask or don't know how to explain (15%)

Homeopathic Medicines:

Of the 101 participants who indicated that they use Homeopathic medicines, only 30% of them indicated that they share the information about these medicines with their primary care doctor. Reasons given for not sharing were:

- Doctor's did not ask / don't see a need (23%)
- US Doctors don't understand (19%)

Key Takeaway:

Over 40% of the participants who take Ayurvedic or Homeopathic medicines indicated that they do not share information with their primary care doctor because they didn't see a need, or they didn't know how to explain, or they felt that the doctors wouldn't understand.

5.2.7 Is there a correlation between the use of Ayurvedic or Homeopathic medicines by age, gender, income, religion, education, number of years in the US, etc?

There was no significant difference in the use of Ayurvedic and Homeopathic medicine usage based on the demographic data such as gender, income, health status, health condition, # of years in the USA, diet preference, education, etc.

Country or Origin:

- Use of Ayurvedic Medicine by Country of Origin (n= 244):
 - Of participants from India, 58% of them used Ayurvedic medicines.
 - All Sri Lankan participants indicated that they used Ayurvedic medicine, while 50% of Pakistani participants and 29% of Bangladeshi participants indicated that they used Ayurvedic medicine.
- Use of Homeopathic Medicine by Country of Origin (n= 143): Of the participants from India, 38% used Homeopathic medicines.

Key Takeaway:

It is hard to say if people who are originally from India are more likely to use Ayurvedic or Homeopathic medicines compared to other South Asian countries since the number of participants from other countries was not statistically significant.

A high percentage of people from India were found to use Ayurvedic (58%) and Homeopathic medicines (38%).

Use of Ayurvedic and Homeopathic medicines based on number of years in the US

- Use of Ayurvedic medicine by number of years in the USA (n= 246): Not much of a difference in the percent of participants who took Ayurvedic medicines based on number of years in the USA.
- Use of Homeopathic medicine by number of years in the USA (n= 143): Not much of a difference in the percent of participants who took Homeopathic medicines based on number of years in the USA except for those participants who have lived in the USA for 11 – 15 years, 56% indicate that they take Homeopathic medicines.

Use of Ayurvedic and Homeopathic medicines based on the age group

- Use of Ayurvedic Medicine by age group (n= 215): Not much of a difference in the number of participants who took Ayurvedic medicines based on the age group. 50% of the people in the age groups 41-50 and 61-70 and 23% of people in the age group 51-60 used Ayurvedic medicines.
- Use of Homeopathic by age group (n= 143): Not much of a difference in the number of participants who took Homeopathic medicines based on the age group. People in the age group 61-70 used it the least (26%).

Based on Religious Affiliation

- Use of Ayurvedic Medicine by Religion (n= 227): There was no significant difference based on the religion.
- Use of Homeopathic by Religion (n= 214): There was no significant difference based on the religion.

Gender: No significant difference was found in terms of gender.

- 39% of males and 36% of females used Ayurvedic medicines.
- 40% of males and 43% females used Homeopathic Medicines.

Health Status:

- Ayurvedic Medicines: 31% participants with “fair” health status indicated that they use Ayurvedic medicines.
- Homeopathic Medicines: 77% participants with “fair” health status indicated that they use Homeopathic medicines.

Education: No significant differences based on the level of education. Participants with different education levels used the alternative medicines.

Income: No significant difference based on the income levels. Participants in all income levels used the alternative medicines.

6. Homeopathic Medicine Practitioner responses: Summary

Three Homeopathic practitioners from Minneapolis and St.Paul responded to emailed questions about their experiences with South Asian patients in Minnesota. They were:

- Monica Raina, Homeopathic practitioner, Minnesota Centre for Homeopathy
- Sujata Owens CCH, R S Hom (NA), DHMS (India) Homeopathic Master Clinician
www.vitalforceconsulting.com
- Sujata Gholkar BHMS CCH (Cand) Homeopathic Practitioner

Here is a summary of their responses.

a. How do South Asian patients come to you?

Through word of mouth, website or mailer or brochure, recommended by neighbors, friends & family; through educational presentations, lectures, referral from other practitioners.

b. When you prescribe, where do people buy the medications from in MN?

A remedy is recommended after a thorough consult. Lower potencies are available in Whole Foods, Vitamin Shoppe, Present Moment, Wedge, and other natural & health food stores. For higher potencies, we source from our own remedy room where I work.

c. Do you regularly explain the potential risks associated with the medications? Give examples please.

There are no side effects or risks associated with Homeopathic remedies. I do explain and educate my clients thoroughly about what to expect, what to observe and give them handouts for information.

I educate them regarding Homeopathic aggravation. It is the response after taking the remedy where the patient has a slight increase in the symptoms followed by amelioration. This type of response means the remedy is best suited to one's constitution. The clients may also get treated without any aggravation.

Just as with any food, vitamin or other supplement, anything new you take to improve your health, should not result in any new symptoms indicative of worse health, physically or emotionally. E.g., if skin is better, but throat is worse, that is not a sign of a healing substance or remedy, even though the person is delighted that their skin looks better.

We look for overall improvement - in deeper indicators such as energy, mood, sleep, appetite, other than the symptoms the clients come in for. We watch closely for changes in follow-ups or through phone/email in between appointments.

d. Are there any types or brands of Homeopathic medicine that you do not prescribe/ recommend?

We (classical homeopaths) do not recommend combination remedies. One remedy at a time, gives a clearer idea of what is changing, and what is causing the change.

All Homeopathic remedies taken under a supervision of professional homeopath are completely safe and effective.

I do recommend over the counter Homeopathic remedies if the clients or potential clients want to try before detailed consultation or first time consultation.

e. Do you recommend specific sites where they should get their medicines from if they are planning to buy on their own?

Lower potencies or strengths can be bought from co-ops. I mail the remedies to my clients that are out of town but in special cases, like acute situations when person needs the access to remedy then I do recommend they buy it at a nearby store.

f. Do you ask what ‘other’ medications they are taking?

Absolutely! Yes, during consultation I do ask detailed history of allopathic medications or any other type of holistic health care.

I have 30 page comprehensive, medical and personal history form that client fills out before first session. Thus I am familiar with medications they are taking. We also talk about it in the session.

g. Do you tell them to let their healthcare providers know what alternative medicines are they taking?

I don't. It is the client's prerogative to let their physician know what they are doing about their health. However, my experience has been that a lot of them do let their healthcare providers know. I don't particularly check for that. I also don't meddle with the physician's prescription. That is between the client and the physician.

Yes. And they sign a form to that effect.

Clients decide themselves whether to tell their physician. Here is my understanding- Clients are well aware of their physician's interest in holistic medicine. Clients do share with those physicians who are open to alternative system of medicine.

h. Are there any common misconceptions with regards to Homeopathic treatments?

No misconceptions, but education is the most important part. Customer has a choice to choose what kind of health care they use for their personal and family's needs. More and more people are ready for natural complementary therapies because they are economic and safe and effective.

Some doctors have misconceptions. Many conventional doctors think or label Homeopathy as a Placebo effect. One has to have a subjective experience to understand the effect of the Homeopathic remedies on our bodies.

As with any food or supplement, if a remedy doesn't suit, it should not be taken, it can result in worse health. Some people don't pay attention to this, and keep continuously taking it (especially if they are not seeing a homeopath), thinking at some point they'll get better.

7. Ayurvedic Medicine Practitioner responses: Summary

Out of three Ayurvedic practitioners contacted only one Ayurvedic practitioner got back to us with the completed questionnaire.

Marcia Meredith, Ayurveda Practitioner/Nurse Practitioner. Health through Ayurveda LLC healththruayurveda.com. Here is a summary of responses from Marcia Meredith.

a. How do South Asian patients come to you?

Through word of mouth, website or mailer or brochure, recommended by friends & family.

b. When you prescribe, where do people buy the medications from in MN?

They purchase any herbal formulas or tablets I recommend directly from me. I only use herbal products from Banyan Botanicals, an Ayurvedic Herbal Company based in the US.

c. Do you regularly explain the potential risks associated with the medications?

Yes, I always ask my clients to watch for any negative side effects. The definition of a medicine, according to Ayurveda, is that which causes no negative side effects. So, if my clients have any reaction to the herbs I tell them to stop it right away.

d. How do you make sure that they are taking the right dosage?

There is no way for me to make sure they are taking the correct dose. I always give detailed instructions when suggesting an herbal therapy. The client has the right to stop the therapy, or take it differently from what I have suggested, if they decide to do so.

e. Are there any types or brands of Ayurvedic medicine that you do not prescribe/ recommend?

I do not suggest my clients use herbal medicine or any type of Ayurvedic medicine from India or any other country. I only use herbal products from the US Company Banyan Botanicals because I know they test every herb for heavy metals and toxins and will not use an herb if it does not pass their standards.

f. Do you recommend specific sites where they should get their medicines from if they are planning to buy on their own?

Lower potencies or strengths can be bought from co-ops. I mail the remedies to my clients that are out of town but in special cases, like acute situations when person needs the access to remedy then I do recommend they buy it at a nearby store. I trust Banyan Botanicals. I have visited their warehouse in Albuquerque, NM and saw their process with the herbs they use. I only use their products. Another reputable Ayurvedic herbal company in the US is Organic India.

g. Do you ask what ‘other’ medications they are taking?

I always review all pharmaceutical medications, supplements, and herbals that my clients are using. I am very aware of potential interactions of medications and herbals and educate my clients about their choices.

h. Do you tell them to let their healthcare providers know what alternative medicines are they taking?

Yes.

i. Are there any common misconceptions with regards to Ayurvedic treatments?

Some may think that Ayurveda is just herbal medicine, but Ayurveda is a complete system of medicine. Dietary and lifestyle changes are an important factor in all Ayurvedic treatments. Food is medicine.

8. Conclusion & Recommendations

The AHMSAM survey is the first step in understanding the prevalence of Ayurvedic and Homeopathic medicine usage in the South Asian community living in Minnesota. The results from this study have helped us gain a better understanding of the prevalence of alternative and complementary medicine usage, the source of information for these medicines and where these medicines are purchased, ailments for which these are commonly used and the reluctance of South Asians in Minnesota to share the information with their primary care providers. Based on the survey results, one can conclude that the use of Ayurvedic and Homeopathic medicines is quite prevalent in the South Asian community in MN. The participants who use either Homeopathic or Ayurvedic medicines seem to incorporate them as a part of their lifestyle and seem to use them for a number of years. Other than the practitioner, participants also depend on family & friends to give them advice about which Ayurvedic or homeopathic product to use, which is very common in South Asian culture. Most participants did not share information about their alternative medicine usage with their primary care doctor in the US because either they didn't see a need, or they didn't know how to explain, or they felt that it is very culture specific and the doctors here won't understand.

Based on the findings from this research, AshaUSA and the Refugee and International Health Unit at MDH will work with the community to create awareness and implement various programs to ensure safe use of these medicines. This report will also be distributed widely to health care providers and legislators to increase their awareness of the use of Ayurvedic and Homeopathic medicines in the South Asian community and start a dialogue about ways to talk about the use of these medicines in a culturally competent way.

8.1 Recommendations

The following section includes some key recommendations based on the results of the AHMSAM survey.

a) For the South Asian Community:

1. *Be careful as to where you purchase your Ayurvedic or Homeopathic products.*

- Make sure that it is manufactured by a reputable company. FDA does not evaluate Ayurvedic or Homeopathic medicines for safety, quality, and effectiveness. This also applies to buying products on the internet. FDA urges consumers to beware of unregulated internet drug sellers.
- Many people believe that products labeled "natural" are always safe and good for them. This is not necessarily true. Herbal medicines do not have to go through the testing that drugs do.
- Although people sometimes assume that all Homeopathic remedies are highly diluted and therefore unlikely to cause harm, some products labeled as Homeopathic can contain substantial amounts of active ingredients and therefore could cause side effects and drug interactions.
- If you are thinking about using an herbal medicine, first get information on it from reliable sources.

2. *Before you purchase review the ingredients and the expiration date.*

- AHMSAM research team found some Ayurvedic medicines on the stores shelves which had expired.
- Understand the ingredients of any herbal medicines you take, and make certain you can trust that the product does not contain lead, arsenic or mercury.
- Certain populations, including children, are particularly at risk for the toxic effects of heavy metals.

3. *Tell your healthcare professional about all alternative products.*

- Some herbs, minerals, and metals can interact with each other and with conventional medications.
- Show your health care provider any medicines you are taking including the labels.
- Do not use Ayurvedic or Homeopathic medicines to replace conventional care or to postpone seeing a healthcare provider about a medical problem.
- Women who are pregnant or nursing, or people who are thinking of using Ayurvedic or Homeopathic approaches to treat a child, should consult their (or their child's) health care provider.
- Tell all your health care providers about any complementary and integrative health approaches you use. Give them a full picture of what you do to manage your health. This will help to ensure coordinated and safe care.

4. *If you have symptoms that concern you, contact:*

- The poison center (800-222-1222), or a medical toxicologist or your health care provider

b) For Health Care Providers

- The medical professionals should gain an understanding of Homeopathic and Ayurvedic medicines so that they can ask questions on the use of these medicines with their patients from a position of understanding.
- When the medical professionals are treating South Asian community members, they should specifically ask if they are using any complementary medicines such as Ayurveda or Homeopathy. If they are using them, encourage them to show medicines including the labels. Don't just ask for "other medications taken" because there are some communities that only consider western medications as "medicine."

c) For the Minnesota Department of Health

- MDH should periodically review "import alerts" by FDA on brand-specific Indian spices (which are extensively used within the SA community), Ayurvedic and Homeopathic medicines and alert the local stores (natural and South Asian Grocery stores).

- The demographics within Minnesota have changed a lot since 2000. The population continues to grow more diverse, includes many growing foreign-born communities. Most of them are first generation immigrants that tend to bring habits and beliefs about the alternative medicines from their country of origin, as it was clearly noted by the Asian Indian populations' use of Ayurveda and Homeopathy. MDH should develop material on complementary and alternative medicines used by different ethnic communities represented in Minnesota and widely distribute it to health care professionals to aid their understanding of different complementary and alternative medicines used in the general population living in Minnesota.

d) For the Policymakers

- The Electronic Health Records should include questions related to complementary and alternative medicines as part of the patient's profile.
- The medical education should include information about complementary and alternative medicines used by the community at large within United States

8.2 Next Steps

1. Develop culturally competent training materials for health care providers that includes content specific to these complementary medicines when working with the South Asian population.
2. Partner with public health organizations and policy organizations to establish resources for research and education to increase awareness of the use of Ayurvedic and Homeopathic medicines in the South Asian population.
3. MDH will continue to work collaboratively to finish educational materials and broad dissemination to temples, community-based organizations (CBOs), and pediatric offices.
4. MDH will create a webpage devoted to this work and messaging to those who use Ayurvedic medications.
5. MDH will meet with local public health partners to increase awareness of potential risks and recommendations in treating South Asian children.
6. AshaUSA will leverage social media and website to share key findings and recommendations from AHMSAM report with the South Asian community and health care providers.
7. AshaUSA will develop materials to provide an overview of Ayurvedic and Homeopathic medicines for the health care professionals which can be downloaded from the website.

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10. Appendices

Appendix 1: Parts of the AHMSAM survey

SECTION 1: GENERAL HEALTH STATUS

2. How do you describe your current health status?

- Excellent
- Very good
- Good
- Fair
- Poor

3. Have you ever had any of the following health issues? (Select all that apply)

- | | | | |
|---|-----|----|------------|
| <input type="radio"/> Diabetes | Yes | No | Don't Know |
| <input type="radio"/> High Blood Pressure | Yes | No | Don't Know |
| <input type="radio"/> High Cholesterol | Yes | No | Don't Know |

Section 2: Ayurvedic Medicine Usage Ailments

9. Where do you get information on what Ayurvedic medicines to use?

- Internet
- Ayurvedic Doctor / Practitioner
- Friends
- Family
- Ayurvedic Product Websites
- Other

Please specify what "other" ways you get information about the Ayurvedic medicine: _____

8. Do you go to an Ayurvedic doctor / practitioner?

- Yes
- No
- Don't Know

9. Where do you see the Ayurvedic doctor / practitioner?

- N/A
- USA
- Bangladesh
- Bhutan
- India

- Nepal
- Pakistan
- Sri Lanka
- Other _____

10. Where do you get your Ayurvedic medicines from?

- From my home country (home country name): _____
- Order online (list the websites): _____
- Indian Grocery Stores (grocery store names) _____
- Local Food stores in the US (list the store names) _____
- Ayurvedic Doctor / Practitioner _____
- Other: _____

Section 3: Homeopathic Medicine Usage

20. Have you shared information about homeopathic medicine you use with your primary care doctor/practitioner?

- Yes
- No
- Don't Know

21. Reason for not sharing the information about homeopathic medicine you use with your primary care doctor/practitioner?

Section 4: Demographic section

26* How long have you lived in the United States?

- Visiting
- 0- 5 years
- 6 – 10 years
- 11 – 15 years
- 16 – 30 years
- 31+

27. *What is the highest level of education you have completed?

- Less than High School
- High School or GED
- Associate Degree
- Bachelor's Degree (BA, BS, etc)
- Graduate Degree (MA, MBA, PhD, MD, etc)

31. * Dietary Restrictions?

- None
- Halal
- Vegetarian
- Vegan
- Gluten-free
- Lactose free

Appendix 2: Conditions for which Ayurvedic and Homeopathic medicines are used

Conditions Ayurvedic medicines used for	Conditions Homeopathic medicines used for
Anemia	Allergies
Back pain	Anemia.
Cholesterol	Arthritis
Cold, cough and skin products	Blocked sebaceous gland in scalp
Crohn's Disease	Bronchitis
Fever	Bruises
Gas	Chest pain
General wellbeing	Chills
Hormonal balance	Cough/cold
Hyper Thyroid	Diabetes
Immune issues and hormonal balance	Diarreah
Jaundice	Fevers
Just for hair	Fibromyalgia
Kidney stone	Immunity boost, arthritis
Memory	Menstrual uses
Migraine	Minor injuries and swellings
Sinus problem	Minor Pain
Stomach issues related to digestion	PMS
System Health	Sinus/cold
Conditions Ayurvedic medicines used for kids	Sneezing
Allergies	Stomach Problem
Asthma	Strong bones and teeth
Cold & cough	Syndrome X
Conditions Homeopathic medicines used for kids	Teething in babies.
Baby Teething	Tonsils
Bone health	Urinary Track Infection
Broken tibia - symphytum	
Ear infection	
Homeopathic honey based syrup for cough	
Wart on foot	